

# An annotated checklist of vascular plants of Cherangani hills, Western Kenya

Yuvenalis Morara Mbuni<sup>1,2,4,\*</sup>, Yadong Zhou<sup>1,3,\*</sup>, Shengwei Wang<sup>1,2</sup>,  
Veronica Mutele Ngumbau<sup>1,2,4</sup>, Paul Mutuku Musili<sup>4</sup>, Fredrick Munyao Mutie<sup>1,2,4</sup>,  
Brian Njoroge<sup>1,2,4</sup>, Paul Muigai Kirika<sup>4</sup>, Geoffrey Mwachala<sup>4</sup>, Kathambi Vivian<sup>1,2,4</sup>,  
Peninah Cheptoo Rono<sup>1,2,4</sup>, Guangwan Hu<sup>1,3</sup>, Qingfeng Wang<sup>1,3</sup>

**1** Wuhan Botanical Garden, Chinese Academy of Sciences, Wuhan 430074, Hubei, PR China **2** University of Chinese Academy of Sciences, Beijing 100049, PR China **3** Sino-Africa Joint Research Center (SAJOREC), Chinese Academy of Sciences, Wuhan 430074, Hubei, PR China **4** East African Herbarium, National Museums of Kenya, P. O. Box 45166 00100 Nairobi, Kenya

Corresponding authors: Guangwan Hu ([guangwanhu@wbgcas.cn](mailto:guangwanhu@wbgcas.cn)); Qingfeng Wang ([qfwang@wbgcas.cn](mailto:qfwang@wbgcas.cn))

---

Academic editor: M. Muasya | Received 3 October 2018 | Accepted 22 January 2019 | Published 18 April 2019

---

**Citation:** Mbuni YM, Zhou Y, Wang S, Ngumbau VM, Musili PM, Mutie FM, Njoroge B, Kirika PM, Mwachala G, Vivian K, Rono PC, Hu G, Wang Q (2019) An annotated checklist of vascular plants of Cherangani hills, Western Kenya. *PhytoKeys* 120: 1–90. <https://doi.org/10.3897/phytokeys.120.30274>

---

## Abstract

Cherangani hills, located in Western Kenya, comprises of 12 forest blocks, maintaining great plant diversity. However, little attention to plant diversity studies has been paid to it in the past years. Here, we present a checklist of the vascular plants of this region obtained through intensive field investigations and matching of herbarium specimens. In total, 1296 species, including 17 endemic species are documented, belonging to 130 families and 608 genera. This flora represents 18.50%, 43.83% and 54.17% of the Kenyan species, genera and families, respectively. The habit, habitat and voucher specimens, as well as brief notes on the distribution of each taxon recorded are presented in this checklist. It is the first exhaustive inventory of the terrestrial vascular plants in Cherangani hills which is a significant regional centre for plant diversity.

## Keywords

Checklist, Cherangani hills, vascular plants, diversity, endemism

---

\*Contributed equally as the first authors.



## Table of contents

Introduction.....	2
Materials and methods .....	3
Study site and current vegetation status.....	3
Specimen collection and identification .....	5
Checklist.....	5
Results and discussion .....	5
Families, genera and species diversity.....	5
Growth habit .....	6
Endemic and threatened species .....	7
Exotic species .....	8
New records .....	8
Conclusion.....	10
Checklist .....	10
Part 1 Lycophytes.....	10
Part 2 Monilophytes.....	11
Part 3 Gymnosperms.....	14
Part 4 Angiosperms .....	14
Acknowledgements.....	87
References .....	88

## Introduction

One of the most critical issues on the global, regional and national agenda is the need to preserve biodiversity for future generations and concurrently strive to understand the indigenous knowledge of resource management practices (Nehal et al. 2004). The concern for biodiversity preservation by government has highlighted the importance derived from broad and small scale vegetation (Whittaker et al. 1979; Frood and Calder 1987; Lunt 1990). Well managed forests are very useful in biodiversity conservation (Sayer et al. 1995). Conserving plant species of special interest in the tropical forest ecosystems ensures that the vital socio-economic and environmental services (e.g. soil and water conservation and wood and non-wood products) are in constant supply to the local communities living near these forests.

Much of the world's terrestrial plant diversity occurs in the tropical forests, where they are facing rapid deforestation (FAO 1997). Agricultural farming increased by 200% at the expense of the tropical forests between 1900 and 1990 (UNEP 2009a). Currently, many forests in the tropics are facing a myriad of threats including: unsustainable harvesting practices, illegal encroachment and degradation by the dependent communities (UNDP 2006). Over the last 20 years, the local inhabitants have encroached upon the forest land, converting it into settlement and farmlands (UNEP 2009a). Other factors contributing to the forest loss include change of ecological processes due to climate



change, resulting in alteration of biogeochemical cycles and potential species loss (Wang et al. 2001). Moreover, the rapidly increasing human population is the main reason for the large forest loss in East Africa (Lung and Schaab 2009). In addition, ineffective forest policy implementation has also led to the biodiversity loss in Kenya.

The main goal of a checklist is the provision of high-quality baseline data of a given area or forest on all the accepted taxa. The collection of species resource information, namely species inventory, is the primary component of the biodiversity catalogue and the easiest to understand and operate (Heywood et al. 1997), with the nomenclature being the chief focus, as it is fundamental in the communication about plants and the key to biodiversity status. The process involves investigation, classification, ordering, quantification, mapping, analysis and synthesis of species information. Around the world, research on check listing of plants has been done or is on-going in various places (Chong et al. 2009). Although numerous botanists have collected plant specimens from Cherangani hills forest, no comprehensive species studies have been undertaken in all forest blocks (Synott 1979). In Kenya, numerous studies on plant checklists covering different regions have been undertaken on various ecological regions. Some of the major plant checklists include, Bura Tana River (Gachathi et al. 1994), Ol Ari Nyiro Range (Muasya et al. 1994), Mount Elgon (Tweedie 1976), Taita hills (Beentje 1988); (Thijs et al. 2013), Mount Nyiru (Bytebier and Bussmann 2000), Shimba hills (Luke 2005), Kakamega forest (Fischer et al. 2010), Nandi Forests (Girma et al. 2015) and Mount Kenya (Zhou 2017). For Cherangani hills forest, few ad hoc expeditions resulted in several herbarium collections but failed to give the actual floristic listing, composition and distribution of the species (Blackett 1994).

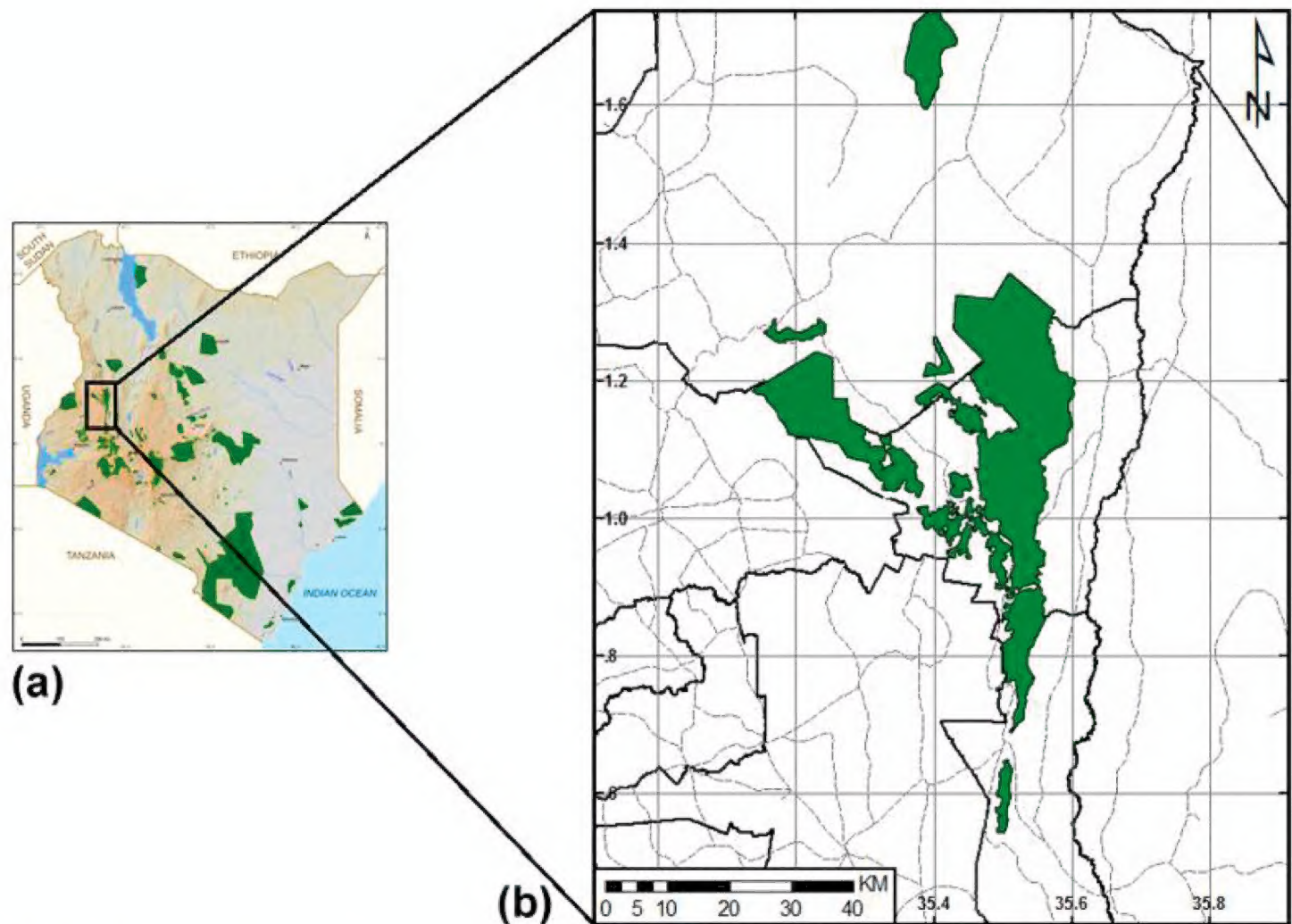
The aim of this paper is to provide the first comprehensive checklist of the vascular species of Cherangani hills. The checklist will provide the basis for further studies of the indigenous species. It will also assist in implementing policies and strategies for the ecological research and conservation of this unique Highland forest ecosystem in Western Kenya.

## **Materials and methods**

### **Study site and current vegetation status**

Cherangani hills are located in the western side of Kenya within an area defined by 1°16'N, 35°26'E and comprises 12 forest blocks, including Kapolet, Cheboyit, Chemurkoi, Embobut, Kaisungor, Kererr, Kipkunurr, Kiptaberr, Sogotio, Toropket, Kapkanyar and Lelan (UNEP 2009a) (Fig. 1). Within Cherangani hills, relatively undisturbed (nearly primary) forest, as well as disturbed, secondary forest, swamps and riverine forest and natural glades are present. Kapkanyar, Kapolet and Kiptaberr blocks compose the western block Forest Reserves and are comprised of bushland (Pratt et al. 1966), which have undisturbed forest ecology and together total approximately 20,000 ha. They are closed forests as there are no indications of human





**Figure 1.** The locality of Cherangani hills. **a** Map of Kenya **b** the forest blocks of Cherangani hills.

activity, hence there is a higher plant diversity, which is dominated by *Aningeria-Strombosia-Drypetes* forest, with a large area of mixed *Podocarpus latifolius* forest on the higher slopes. According to FAO (2010), all terrestrial ecosystems classified as primary forests are characterised as the most species-rich and diverse. This area is therefore classified as closed forest since it has a tree cover of 40% or more (UNEP et al. 2009b). To the east, forest reserves' blocks of Lelan, Embobut, Kererr, Kaisungor, Toropket, Chemurkoi, Kipkunurr, Cheboyit, Sogotio and Kapchemutwa are also comprised of woodland and grassland which are separate and have been interfered with by humans and domestic animals. Areas with vegetation cover other than forests, but are not under intensive land use, are defined as woodlands and are mostly used for cattle grazing (Holmgren 2006).

The forests on the south-eastern block along the escarpment crest are fragmented and separated by extensive natural grasslands, scrub and farmland especially in the central part. This area holds *Juniperus-Nuxia-Podocarpus* forest, with heavily disturbed *Podocarpus falcatus* forest on the eastern slopes. Generally, most of this area consists of middle-aged secondary forest, but much of it is characterised by very young secondary forest. This area is generally highly degraded and fragmented and the composition of plant communities has been greatly influenced by past commercial logging activities and other anthropogenic disturbances (Mitchell and Schaab 2008). Within the valleys in the upper peak areas, remnants of *Juniperus-Maytenus undata-Rapanea-Hagenia* forest could be found. *Cyathea manniana* occurs in the stream valleys and there are



patches of Bamboo (*Arundinaria alpina*), even though there is no bamboo zone along the Cherangani hills. At higher altitudes, the forest is interspersed with a mixture of heath vegetation and swamps and the latter with *Lobelia aberdarica*, *Senecio johnstonii* and *Dendrosenecio cheranganiensis*. There are different types of vegetation especially in the east, with little obvious altitudinal zonation and an establishment of plantations of *Cupressus lusitanica*, *Pinus patula* and a few *Eucalyptus* species.

### Specimen collection and identification

Between July 2015 and May 2018, the botanical team consisting of botanists from the National Museums of Kenya and Sino-Africa Joint Research Center held several explorations in the Cherangani hills. A combination of general walk-over survey method (Filgueiras et al. 1994) and a plotless landscape defined sampling methods for plant specimen collection and sight observation was used to aid the characterisation of the vegetation (Hall and Swaine 1981). Plant specimens bearing flower or fruit were collected and identified. Details of identified specimens were recorded. Specimen details included habit, habitat, distribution and collector details. The specimens were then preserved by pressing.

Voucher specimens were deposited at the East African Herbarium, Nairobi, Kenya (EA) and Herbarium of Wuhan Botanical Gardens, Wuhan, China), labelled with the plant's scientific name and common names, collection date, GPS coordinates, habitat, collector, identifier and a herbarium specimen number. Standard references were used for plant identification (FTEA 1952–2012; Blundell 1987; Agnew and Agnew 1994; Beentje 1994; Stewart and Campbell 2006; Agnew 2013).

### Checklist

A comprehensive checklist of the vascular plant taxa of the Cherangani hills is enumerated below. Within this checklist, species are organised alphabetically in each family. The families are divided into four groups, namely lycophytes, monilophytes, gymnosperms and angiosperms. Families of lycophytes and monilophytes are organised based on the PPG I system (PPG I 2016), while those of gymnosperms are organised based on Christenhusz et al. (2011) and families of angiosperms are organised based on the APG IV system (APG IV 2016).

## Results and discussion

### Families, genera and species diversity

The current checklist contains a total of 1296 vascular species belonging to 130 families and 608 genera that are indigenous, naturalised or introduced to Cherangani hills. This represents 18.50% of the total number of 7004 Kenyan vascular species obtained,



**Table 1.** The 10 largest families and genera of the vascular plants of Cherangani hills.

Family	Species	Genera	Genera	Family	Species
Asteraceae	165	66	<i>Helichrysum</i>	Asteraceae	20
Fabaceae	98	39	<i>Cyperus</i>	Cyperaceae	19
Lamiaceae	68	32	<i>Plectranthus</i>	Lamiaceae	17
Orchidaceae	67	23	<i>Crotalaria</i>	Fabaceae	14
Rubiaceae	64	25	<i>Vernonia</i>	Asteraceae	13
Poaceae	59	40	<i>Euphorbia</i>	Euphorbiaceae	13
Cyperaceae	40	09	<i>Solanum</i>	Solanaceae	13
Apocynaceae	36	20	<i>Carex</i>	Cyperaceae	12
Acanthaceae	36	17	<i>Justicia</i>	Acanthaceae	10
Malvaceae	34	10			

43.83% of the total number of 1387 Kenyan genera and 54.17% of the total number of 240 Kenyan families (MEWNR and RDA 2015). However, the number of species is still increasing because of the discovery of new records, new naturalised species and the introduction of invasive species.

The top 10 species-rich families are Asteraceae (66 genera/165 species), Fabaceae (39/98), Labiatae (32/68), Orchidaceae (23/65), Rubiaceae (25/65), Poaceae (40/59), Cyperaceae (8/40), Apocynaceae (20/38), Acanthaceae (17/36) and Malvaceae (10/34) (Table 1). Fabaceae, Poaceae and Asteraceae are amongst the three largest families in Cherangani hills and are also the largest families in the world, having 745 genera/19560 species, 707 genera/11337 species and 1620 genera/23600 species, respectively (Stevens 2012) and also the largest families in Kenya, having 98 genera/576 species, 137 genera/565 species and 99 genera/403 species (Zhou et al. 2017a). The 9 most species-rich genera are *Helichrysum* (20, Asteraceae), *Cyperus* (19, Cyperaceae), *Plectranthus* (17, Lamiaceae), *Crotalaria* (14, Fabaceae), *Vernonia* (13, Asteraceae), *Euphorbia* (13, Euphorbiaceae), *Solanum* (13, Solanaceae), *Carex* (12, Cyperaceae) and *Justicia* (10, Acanthaceae) (Table 1).

Growth habit

The growth habit of Cherangani hills signifies that herbaceous species have the highest percentage of 54.39%. Herbs are plants without persistent woody stems. Shrubs are represented with 23.76% and can be defined as self-supporting woody plants branching at or near the ground or with several stems from the base or a single stem less than 2 m. A climber is also defined as a plant that grows upwards by attaching itself to other structures which it uses as support. A tree is a perennial woody plant with a secondary thickening, with a clear main trunk, is dependent on the single trunk and has a height of more than 3 m (Beentje 2016). Trees are also represented with 11.57% of the total species (Table 2). Plant species richness is usually higher in the herbaceous layer than in any other forest stratum. It is often stated that most plant biodiversity in the forest



ecosystems is found in the herbaceous layer (Roberts 2004; Whigham 2004), which concludes that herbaceous flora in Cherangani hills has invaded most of the areas and hence has the highest percentage contributing to the high plant diversity.

### Endemic and threatened species

There are 17 endemic plant species in Cherangani hills (Source FTEA), belonging to 5 families and 13 genera and accounting for 1.23% of the total species of which most are from the herb layer (Table 3). The region is not well protected, hence poses great danger to these species, for example, *Dendrosenecio cheranganiensis* is classified as a vulnerable species by IUCN (2013). In total, there are 34 threatened plant species (Source FTEA), belonging to 17 families and 28 genera representing 2.62% of the total plants in Cherangani hills (Table 4). Over-exploitation and habitat loss have led to species becoming rare and threatened, for example, *Polyscias kikuyuensis* is highly valued for its excellent timber, hence highly extracted.

**Table 2.** Growth habit of the plants of Cherangani Hills.

Habit	No. of species	Percentage
Trees	150	11.57%
Shrubs	308	23.76%
Climbers/Lianas	81	06.25%
Herbs	705	54.39%
Epiphytes	46	3.55%
Parasitic herb	6	0.46%
Total	1296	100%

**Table 3.** The endemic plants of Cherangani hills.

Family	Endemic species	Growth habit
Acanthaceae	<i>Justicia leikpiensis</i> S. Moore	Herb
	<i>Megalochlamys kenyensis</i> Vollesen	Herb
Asteraceae	<i>Conyza agnewii</i> Mesfin	Herb
	<i>Senecio cheranganiensis</i> Cotton & Blakelock	Herb
	<i>Senecio hedbergii</i> C. Jeffrey	Shrub
	<i>Senecio plantagineoides</i> C. Jeffrey	Herb
	<i>Senecio pseudosubsessilis</i> C. Jeffrey	Herb
	<i>Senecio snowdenii</i> Hutch	Shrub
	<i>Kleinia scottiioides</i> C. Jeffrey	Herb
	<i>Bidens elgonensis</i> (Sherff) Agnew	Herb
	<i>Carduus schimperi</i> Sch. Bip.	Herb
	<i>Dendrosenecio cheranganiensis</i> (Cotton & Blakelock) E.B. Knox	Shrub
	<i>Emilia tricholepis</i> C. Jeffrey	Herb
	<i>Helichrysum brownei</i> S. Moore	Shrub
Moraceae	<i>Dorstenia afromontana</i> R.E. Fr.	Herb
Boraginaceae	<i>Cynoglossum cheranganiense</i> Verdc.	Herb
Orobanchaceae	<i>Buchnera scabridula</i> E.A. Bruce	Herb



**Table 4.** The threatened plants of Cherangani hills.

Family	Species
Apiaceae	<i>Peucedanum aculeolatum</i> Engl., <i>Pimpinella lindblomii</i> H. Wolff
Araliaceae	<i>Polyscias kikuyuensis</i> Summerh.
Asteraceae	<i>Ethulia vernonioides</i> (Schweinf.) M.G. Gilbert, <i>Euryops brownei</i> S. Moore, <i>Gutenbergia rueppellii</i> Sch. Bip., <i>Senecio pseudosubsessilis</i> C. Jeffrey, <i>S. rhammatophyllus</i> Mattf., <i>Helichrysum meyeri-johannis</i> Engl., <i>Guizotia jacksonii</i> (S. Moore) J. Baagøe.
Balsaminaceae	<i>Impatiens hoehnelii</i> T.C.E. Fr., <i>I. meruensis</i> Gilg, <i>I. pseudoviola</i> Gilg, <i>I. tinctoria</i> A. Rich.
Boraginaceae	<i>Cynoglossum cheranganiense</i> Verdc.
Campanulaceae	<i>Lobelia aberdarica</i> R.E. Fr. & T.C.E. Fr., <i>L. cheranganiensis</i> Thulin, <i>L. deckenii</i> (Asch.) Hemsl., <i>L. duriprati</i> T.C.E. Fr., <i>Wahlenbergia scottii</i> Thulin
Euphorbiaceae	<i>Euphorbia brevicornu</i> Pax
Fabaceae	<i>Trifolium cheranganiense</i> J.B. Gillett
Hypericaceae	<i>Hypericum kiboense</i> Oliv.
Leguminosae	<i>Galega lindblomii</i> (Harms) J.B. Gillett
Malvaceae	<i>Abutilon mauritianum</i> (Jacq.) Medik.
Orchidaceae	<i>Diaphananthe montana</i> (Piers) P.J. Cribb & J. Stewart, <i>Habenaria altior</i> Rendle, <i>Polystachya bella</i> Summerh.
Poaceae	<i>Calamagrostis hedbergii</i> Melderis
Ranunculaceae	<i>Delphinium macrocentrum</i> Oliv.
Rosaceae	<i>Rubus scheffleri</i> Engl.
Rubiaceae	<i>Galium kenyanum</i> Verdc. <i>Spermacoce minutiflora</i> (K. Schum.) Verdc.
Vitaceae	<i>Cyphostemma cyphopetalum</i> (Fresen.) Desc. ex Wild & R.B. Drumm.

Exotic species

A total of 47 species of exotic plants, belonging to 42 genera and 21 families, were realised from Cherangani hills (Table 5). Introduced, cultivated or naturalised species represent 3.62% of the total species of Cherangani hills. The top 4 exotic plant families include: Asteraceae (12 species), Fabaceae (5), Solanaceae (4) and Lamiaceae (3). Out of the 48 plant species introduced, herbs have a higher percentage 63% (30), followed by shrubs 24% (11) and then trees 13% (6). Most of the species have been introduced from South America (14), North America (11), Mexico (10), Central America (5), South Asia (5) and from other regions below 4.

New records

In the recent years, investigation researchers from Kenya and China have found many new species and several new records in Kenya, including, *Sedum keniense* (Crassulaceae) (Zhou et al. 2016a), *Zehneria subcoraicea* (Cucurbitaceae) (Zhou et al. 2016b), *Z. longiflora* (Cucurbitaceae) (Wei et al. 2017), *Cissampelos keniensis* (Menispermaceae) (Zhou et al. 2017b) and *Adenia angulosa* (Ngumbau et al. 2017). So far, no new species from this region has been found, although, *Parastriga alectroides* (Scrophulariaceae), is recorded for the first time in Kenya, particularly in Cherangani hills. An updated description, comparisons with closely related species and revised conservation status for this species has been described.



**Table 5.** The exotic plants of Cherangani hills.

Species	Growth Habit	Family	Regions of origin
<i>Acanthospermum glabratum</i> (DC.) Wild	Herb	Asteraceae	South America
<i>Ageratina adenophora</i> (Spreng.) R.M. King & H. Rob.	Herb	Asteraceae	Mexico and South America
<i>Brassica rapa</i> L.	Herb	Brassicaceae	North America
<i>Bryophyllum proliferum</i> Bowie ex Hook.	Herb	Crassulaceae	Madagascar
<i>Caesalpinia decapetala</i> (Roth) Alston	Shrub	Fabaceae	India
<i>Cestrum aurantiacum</i> Lindl.	Shrub	Solanaceae	North and South America
<i>Conyza boranensis</i> (S. Moore) Cufod.	Herb	Asteraceae	North America and East Asia
<i>Cupressus lusitanica</i> Mill.	Tree	Cupressaceae	North America
<i>Cuscuta campestris</i> Yunck.	Climber	Convolvulaceae	North America
<i>Datura stramonium</i> L.	Shrub	Solanaceae	Mexico
<i>Desmodium adscendens</i> (Sw.) DC.	Herb	Fabaceae	South America
<i>Desmodium uncinatum</i> (Jacq.) DC.	Shrub	Fabaceae	South Africa
<i>Erigeron bonariensis</i> L.	Herb	Asteraceae	South America
<i>Eucalyptus saligna</i> Sm.	Tree	Myrtaceae	Australia
<i>Euphorbia hirta</i> L.	Herb	Euphorbiaceae	North America
<i>Galinsoga parviflora</i> Cav.	Herb	Asteraceae	Central and South America
<i>Gomphocarpus physocarpus</i> E. Mey.	Herb	Apocynaceae	Australia
<i>Grevillea robusta</i> A.Cunn. ex R. Br.	Tree	Proteaceae	Australia
<i>Hyptis pectinata</i> (L.) Poit.	Herb	Lamiaceae	Central America
<i>Kalanchoe prolifera</i> (Bowie ex Hook.)	Herb	Crassulaceae	Madagascar
<i>Lantana camara</i> L.	Shrub	Verbenaceae	South America
<i>Lantana trifolia</i> L.	Shrub	Verbenaceae	North America
<i>Oxalis latifolia</i> Kunth	Herb	Oxalidaceae	Mexico
<i>Passiflora edulis</i> Sims	Climber	Passifloraceae	North America
<i>Passiflora subpeltata</i> Ortega	Climber	Passifloraceae	Mexico and Central America
<i>Persea americana</i> Mill.	Tree	Lauraceae	Mexico and South America
<i>Physalis peruviana</i> L.	Herb	Solanaceae	South America
<i>Phytolacca octandra</i> L.	Shrub	Phytolaccaceae	Mexico and Central America
<i>Pinus patula</i> Schiede ex Schltdl.	Tree	Pinaceae	Mexico
<i>Plectranthus barbatus</i> Andrews	Shrub	Lamiaceae	South Africa
<i>Psidium guajava</i> L.	Tree	Myrtaceae	Central and South America
<i>Ricinus communis</i> L.	Herb	Euphorbiaceae	India
<i>Rubus niveus</i> Thunb.	Shrub	Rosaceae	South Asia
<i>Rubus rosifolius</i> Sm.	Herb	Rosaceae	South Asia
<i>Rumex acetosella</i> L.	Herb	Polygonaceae	South Asia
<i>Salvia leucantha</i> Cav.	Herb	Lamiaceae	Mexico
<i>Schkuhria pinnata</i> (Lam.) Kuntze	Herb	Asteraceae	South America
<i>Senna septemtrionalis</i> (Viv.) H.S. Irwin & Barneby	Shrub	Fabaceae	Mexico and Central America
<i>Senna spectabilis</i> (DC.) H.S. Irwin & Barneby	Shrub	Fabaceae	Mexico and Central America
<i>Sigesbeckia orientalis</i> L.	Herb	Asteraceae	Australia
<i>Solanum mauritianum</i> Scop.	Shrub	Solanaceae	South America
<i>Sonchus oleraceus</i> (L.) L.	Herb	Asteraceae	Europe and West Asia
<i>Tagetes minuta</i> L.	Herb	Asteraceae	South America
<i>Tithonia diversifolia</i> (Hemsl.) A. Gray	Herb	Asteraceae	Mexico & Central America
<i>Tridax procumbens</i> (L.) L.	Herb	Asteraceae	West Africa
<i>Xanthium strumarium</i> L.	Herb	Asteraceae	North America



## Conclusion

Efforts to ensure the conservation of Cherangani forest vegetation habitat should be prioritised with much emphasis on the endangered, rare or endemic species, according to the checklist result. The adopted approach in these studies may help to focus on certain species and the setting of research and conservation priorities. The high proportion of Cherangani endemic species and the geographic rarity component of the flora associated with that of Mount Kenya and Mount Elgon plants, are aspects that makes these habitats interesting. Cherangani hills have not been inventoried exhaustively, including all of its 12 forest blocks. Our study provides the baseline data for further studies on the invasion process and on the patterns of biodiversity. More study approaches may also contribute to the identification of species which are threatened by anthropogenic impacts and therefore require protection. Community-based forest conservation is also suggested to ensure sustainable utilisation of these forests.

## Checklist

The following lists of species include references to the elevation, and where metres are stated, this means metres above sea level. EA means the East African Herbarium, Nairobi, Kenya; HIB means the Herbarium of Wuhan Botanical Garden, Wuhan, China.

### Part I Lycophytes

#### F1. Lycopodiaceae

2 Genera, 4 Species

***Huperzia dacrydioides* (Baker) Pic. Serm.** Habit: Epiphyte. Habitat: Montane forest, 2000–2500 m. Vouchers: SAJIT 006813 (EA, HIB), FOKP 10913 & 11707 (EA), Mbuni 707 (EA), Evans 811 (EA).

***Huperzia ophioglossoides* (Lam.) Rothm.** Habit: Epiphyte. Habitat: Wet forest and montane forest, 1500–2500 m. Vouchers: SAJIT 007111 (EA, HIB), Burt 1837 & 1838 (EA).

***Huperzia saururus* (Lam.) Travis.** Habit: Epiphyte. Habitat: Moorland, 2550–3500 m. Voucher: Mabberley & McCall 185 (EA).

***Lycopodium clavatum* L.** Habit: Herb. Habitat: Montane & bamboo zone, 2000–2800 m. Vouchers: SAJIT 006821 (EA, HIB), Mabberley & McCall 42 (EA).

#### F2. Selaginellaceae

1 Genus, 1 Species

***Selaginella abyssinica* Spring.** Habit: Herb. Habitat: Often moist rock crevices, 1450–2300 m. Voucher: Agnew 5167 (EA).



## Part 2 Monilophytes

### F3. Marattiaceae

1 Genus, 1 Species

*Marattia fraxinea* Sm. Habit: Herb. Habitat: Montane forest, 1500–2300 m. Voucher: FOKP 1119 (EA, HIB).

### F4. Hymenophyllaceae

1 Genus, 1 Species

*Crepidomanes melanotrichum* (Schltdl.) J.P. Roux Habit: Epiphyte. Habitat: Wet forest on rocks, 1460–2570 m. Voucher: Thulin & Tidigs 55 (EA).

### F5. Anemiaceae

1 Genus, 1 Species

*Mobria caffrorum* (L.) Desv. Habit: Herb. Habitat: Rock crevices, 1800–2500 m. Voucher: Faden 824 (EA).

### F6. Cyatheaceae

1 Genus, 1 Species

*Cyathea manniana* Hook. Habit: Tree. Habitat: Moist montane forest, in dense shade along streams, 1500–2500 m. Voucher: Mabberley 19 (EA).

### F7. Pteridaceae

5 Genera, 10 Species

*Adiantum poiretii* Wikstr. Habit: Herb. Habitat: Dry montane forest, ericaceous zone, 100–3000 m. Vouchers: FOKP 1709 & 1077 (EA, HIB).

*Cheilanthes farinosa* (Forssk.) Kaulf. Habit: Herb. Habitat: Bamboo and moorland zone, 1450–3000 m. Vouchers: SAJIT 004834 (EA, HIB), Mabberley & McCall 240 (EA).

*Cheilanthes bergiana* Schltdl. Habit: Herb. Habitat: Moist shaded river bank, 1600–2300 m. Voucher: FOKP 1721 (EA, HIB).

*Cheilanthes bergiana* Schltdl. Habit: Herb. Habitat: Bamboo and moorland zone, 1450–3000 m. Voucher: FOKP 1721 (EA, HIB).

*Cheilanthes quadripinnata* Kuhn Habit: Herb. Habitat: Moist montane forest, bamboo zone, 1275–2750 m. Vouchers: FOKP 1090 (EA, HIB), Tweedie 3378 (EA).

*Pteris catoptera* Kunze Habit: Herb. Habitat: Forest swamp extending to bamboo zones, 1000–3050 m. Voucher: SAJIT 007091 (EA, HIB).

*Pteris cretica* L. Habit: Herb. Habitat: Dry montane forest, 1500–2700 m. Vouchers: SAJIT 004775 (EA, HIB), FOKP 1003 (EA, HIB), Thulin 56 (EA).



***Pteris dentata* Forssk.** Habit: Herb. Habitat: Upland forest, moist areas, 1000–3000 m. Vouchers: FOKP 1871 & 11367 (EA, HIB), Mbuni 415 (EA).

***Pteris vittata* L.** Habit: Herb. Habitat: Near streams in dense shade, 1250–1600 m. Voucher: Tweedie 2960 (EA).

***Pteris pteridioides* (Hook.) Ballard** Habit: Herb. Habitat: Montane forest, 1550–2100 m. Voucher: FOKP 1726 (EA, HIB).

## F8. Aspleniaceae

1 Genus, 10 Species

***Asplenium abyssinicum* Fée** Habit: Herb. Habitat: Shade areas and bamboo zone, 1800–3500 m. Vouchers: Evans 812 (EA).

***Asplenium aethiopicum* (Burm. f.) Bech.** Habit: Epiphyte. Habitat: Moist bushland, 1400–3600 m. Voucher: Part II Botany 221 (EA).

***Asplenium bugoiense* Hieron.** Habit: Herb. Habitat: Moist montane forest, 2000–2700 m. Voucher: FOKP 1118 (EA, HIB).

***Asplenium cordatum* (Thunb.) Sw.** Habit: Herb. Habitat: Moist, bush land, woodland, 1530–1830 m. Voucher: SAJIT Z0067 (EA, HIB).

***Asplenium erectum* Bory ex Willd.** Habit: Herb. Habitat: Moist forest up to bamboo zone, 1300–2800 m. Voucher: FOKP 1122 (EA, HIB).

***Asplenium linckii* Kuhn** Habit: Herb. Habitat: Moist forest up to bamboo zone, 1750–2500m. Voucher: FOKP 1896 (EA, HIB).

***Asplenium loxoscaphoides* Baker** Habit: Herb. Habitat: Dense shade, 2000–2700m. Voucher: SAJIT 007117 (EA, HIB).

***Asplenium monanthes* L.** Habit: Herb. Habitat: Bamboo zone, 2100–3400 m. Vouchers: FOKP 1078 (EA, HIB), Part II Botany 19 (EA).

***Asplenium protensum* Schrad.** Habit: Epiphyte. Habitat: Moist montane forest, 1400–2900 m. Vouchers: SAJIT 004779 (EA, HIB), Part II Botany 18 (EA).

***Asplenium theciferum* (Kunth) Mett.** Habit: Epiphyte. Habitat: Moist montane forest, 850–2900 m. Vouchers: FOKP 11642 (EA, HIB), Mbuni 642 (EA), Part II Botany 20 (EA).

## F9. Athyriaceae

1 Genus, 1 Species

***Deparia boryana* (Willd.) M. Kato** Habit: Herb. Habitat: Moist forest, 1460–2550 m. Voucher: FOKP 1893 (EA, HIB).

## F10. Dryopteridaceae

4 Genera, 9 Species

***Arachniodes webbiana* (A. Braun) Schelpe.** Habit: Herb. Habitat: Wet forest, 1550–2600 m. Voucher: SAJIT 007087 (EA, HIB).



- Dryopteris pentheri* (Krasser) C. Chr. Habit: Herb. Habitat: Moist forest, 1550–2500 m. Voucher: Tweedie 2681 (EA).
- Dryopteris schimperiana* (Hochst.) C. Chr. Habit: Herb. Habitat: Riverine forest, 2750–3220 m. Voucher: Tweedie 2844 (EA).
- Elaphoglossum acrostichoides* (Hook. & Grev.) Schelpe Habit: Epiphyte. Habitat: Moist montane forest, 1750–2600 m. Voucher: Tweedie 2684 (EA).
- Elaphoglossum deckenii* (Kuhn) C. Chr. Habit: Epiphyte. Habitat: Moist montane forest and bamboo zone, 2200–3300 m. Voucher: Beentje 3382 (EA).
- Polystichum fuscopaleaceum* Alston Habit: Herb. Habitat: Moist montane forest, along streams, 2100–2800 m. Voucher: Faden & Evans 810 (EA).
- Polystichum sinense* (Christ) Christ. Habit: Herb. Habitat: Moist montane forest and Bamboo zone up to moorland, 2430–3500 m. Voucher: FOKP 1004 (EA, HIB).
- Polystichum setiferum* (Forssk.) Moore ex Woyn. Habit: Herb. Habitat: Moist montane forest, up to 3500 m. Voucher: FOKP 11382 (EA, HIB).
- Polystichum volkensii* C. Chr. Habit: Herb. Habitat: Moist montane forest, up to 3300 m. Voucher: FOKP 1004 (EA, HIB).

## F2. Tectariaceae

1 Genus, 1 Species

- Tectaria gemmifera* (Fée) Alston Habit: Herb. Habitat: Common in montane forest, 1200–2500 m. Voucher: Tweedie 2702 (EA).

## F12. Polypodiaceae

4 Genera, 5 Species

- Lepisorus excavatus* (Bory ex Willd.) Ching Habit: Epiphyte. Habitat: Montane forest, ericaceous forest, 3150–3350 m. Vouchers: SAJIT 004784 & 007056 (EA, HIB), Thulin & Tidigs 99 & 233 (EA), FOKP 1743 (EA, HIB).
- Drynaria volkensii* Hieron. Habit: Epiphyte. Habitat: Moist montane forest, 1600–2300 m. Voucher: Tweedie 2799 (EA).
- Loxogramme abyssinica* (Baker) M.G. Price Habit: Epiphyte. Habitat: Dry and wet forests, 1000–3000 m. Vouchers: FOKP 11701 (EA, HIB), Mbuni 701 (EA).
- Pleopeltis excavata* T. Moore Habit: Epiphyte. Habitat: Moist, riverine forest, 1000–3500 m. Voucher: FOKP 1743 (EA, HIB).
- Pleopeltis macrocarpa* (Bory ex Willd.) Kaulf. Habit: Epiphyte. Habitat: Moist forest, 1100–3550 m. Vouchers: Verdcourt et al. 2430 (EA), Beentje 3359 (EA).



### Part 3 Gymnosperms

#### F13. Podocarpaceae

2 Genera, 3 Species

*Afrocarpus falcatus* (Thunb.) C.N. Page. Habit: Tree. Habitat: Upland forest, 1250–2700 m. Voucher: SAJIT 007061 (EA, HIB).

*Afrocarpus gracilior* (Pilg.) C.N. Page Habit: Tree. Habitat: Upland forest, 1500–3300 m. Voucher: FOKP 1797 (EA, HIB).

*Podocarpus latifolius* (Thumb.) R. Br. ex Mirb. Habit: Tree. Habitat: Wet forest with bamboo, *Hagenia*, *Juniperus* and *Olea* forest, 1500–3300 m. Vouchers: FOKP 11611 & 11770 (EA, HIB), Mbuni 592 & 611 (EA).

#### F14. Cupressaceae

1 Genus, 1 Species

*Juniperus procera* Hochst. ex Endl. Habit: Tree. Habitat: Drier upland forest, 1050–2950 m. Vouchers: FOKP 1799 & 11272 (EA, HIB), Mbuni 08 (EA), Malombe & Mlangeni 931 (EA).

### Part 4 Angiosperms

#### F15. Piperaceae

2 Genera, 4 Species

*Peperomia abyssinica* Miq. Habit: Herb. Habitat: Upland forest, 1600–2950 m. Vouchers: FOKP 11389 & 11547 (EA, HIB), Mbuni 284 (EA), Hepper & Field 5034 (EA).

*Peperomia retusa* (L. f.) A. Dietr. Habit: Epiphyte. Habitat: Wet upland forest, 1500–2400 m. Vouchers: SAJIT 006889 (EA, HIB), FOKP 10989 (EA, HIB).

*Peperomia tetraphylla* (G. Forst.) Hook. & Arn. Habit: Epiphyte. Habitat: Wet upland forest, 1400–2400 m. Vouchers: SAJIT 004816 & 005065 (EA, HIB), FOKP 1212 (EA, HIB).

*Piper capense* L. f. Habit: Herb. Habitat: Wet highland forest, 1200–2700 m. Voucher: FOKP 11416 (EA), Mbuni 152 (EA).

#### F16. Annonaceae

1 Genus, 2 Species

*Uvaria leptocladon* Oliv. Habit: Shrub. Habitat: Bushland, 0–1900 m. Vouchers: FOKP 11447 (EA), Mbuni 183 (EA).

*Uvaria scheffleri* Diels Habit: Liana. Habitat: Riverine, woodland, bushland, 900–1800 m. Vouchers: FOKP 11469 (EA), Mbuni 205 (EA).



**F17. Monimiaceae**

1 Genus, 1 Species

*Xymalos monospora* (Harv.) Baill. Habit: Tree. Habitat: Moist forest, 1400–2700 m. Vouchers: SAJIT 004857 (EA, HIB), FOKP 11362 & 11372 (EA, HIB), Mbuni 108 & 616 (EA), Dale 912 (EA), Friis et al. 2514 (EA).

**F18. Lauraceae**

1 Genus, 1 Species

*Ocotea kenyensis* (Chiov.) Robyns & R. Wilczek Habit: Tree. Habitat: Moist forest, 1700–2600 m. Voucher: FOKP 1808 (EA, HIB).

**F19. Araceae**

2 Genera, 3 Species

*Arisaema enneaphyllum* Hochst. ex A. Rich. Habit: Herb. Habitat: Montane forest edge, 2300–2900 m. Voucher: SAJIT 004859 (EA, HIB).

*Arisaema mildbraedii* Engl. Habit: Herb. Habitat: Wet montane forest edge, 1400–2620 m. Vouchers: SAJIT 006909 (EA, HIB), FOKP 11009 (EA, HIB).

*Culcasia falcifolia* Engl. Habit: Herb. Habitat: Marshy forest edges in high rain forest areas, 1370–2135 m. Vouchers: SAJIT 004753 (EA, HIB), FOKP 737 & 1304 (EA, HIB).

**F20. Potamogetonaceae**

1 Genus, 1 Species

*Potamogeton schweinfurthii* A. Benn. Habit: Herb. Habitat: Artificial ponds, 1800–2000 m. Voucher: SAJIT 007071 (EA, HIB).

**F21. Dioscoreaceae**

1 Genus, 2 species

*Dioscorea quartiniana* A. Rich. Habit: Climber. Habitat: Wooded grassland and bushland, 0–2300 m. Vouchers: SAJIT 005067 (EA, HIB), FOKP 11627 & 11765 (EA, HIB), Mbuni 587 & 627 (EA).

*Dioscorea schimperiana* Hochst. ex Kunth Habit: Climber. Habitat: Wooded grassland, 1600–2130 m. Vouchers: Waweru 32 (EA), Nappier 4150 (EA).

**F22. Colchicaceae**

3 Genera, 3 species

*Gloriosa superba* L. Habit: Herb. Habitat: Bushland, up to 2500 m. Vouchers: FOKP 11479 & 11694 (EA, HIB), Mbuni 215 & 694 (EA).



***Androcymbium melanthioides* Willd.** Habit: Shrub. Habitat: Bushland, 1530–2680 m. Voucher: Blake 3090 (EA).

***Wurmbea tenuis* (Hook. f.) Baker** Habit: Herb. Habitat: Grassland, 2130–2750 m. Voucher: Stewart 1002 (EA).

## F23. Smilacaceae

1 Genus, 1 Species

***Smilax anceps* Willd** Habit: Climber. Habitat: Wet forest, 10–2800 m. Voucher: FOKP 1071 (EA).

## F24. Orchidaceae

23 Genera, 65 Species

***Aerangis thomsonii* (Rolfe) Schltr.** Habit: Epiphyte. Habitat: Highland forest, on trunks of trees, above 2300 m. Vouchers: FOKP 11634 (EA), Mbuni 634 (EA).

***Ancistrorhynchus clandestinus* (Lindl.) Schltr.** Habit: Epiphyte. Habitat: On tree branches, 1400–2500 m. Voucher: FOKP 11392 (EA, HIB).

***Angraecum erectum* Summerh.** Habit: Epiphyte. Habitat: Drier forest, 1350–2000 m. Vouchers: FOKP 11303 & 11305 (EA, HIB).

***Angraecum thomsonii* Rolfe** Habit: Epiphyte. Habitat: Shady forest, 1800–2500 m. Voucher: SAJIT 007074 (EA, HIB).

***Ansellia africana* Lindl.** Habit: Epiphyte. Habitat: Amongst tree roots, 0–2350 m. Vouchers: FOKP 11307 (EA, HIB), Mortimer 210 (EA), Webster 9023 (EA).

***Brachycorythis ovata* Lindl.** Habit: Epiphyte. Habitat: Grassland, 2000–2550 m. Vouchers: Napier 1908 (EA), Maas 4691 (EA).

***Bulbophyllum bequaertii* De Wild.** Habit: Epiphyte. Habitat: Shady forest, 1700–2350 m. Voucher: SAJIT 005098 (EA, HIB).

***Bulbophyllum cochleatum* Lindl.** Habit: Epiphyte. Habitat: Shady forest, 1450–2000 m. Voucher: FOKP 11263 (EA, HIB).

***Calanthe sylvatica* (Thouars) Lindl.** Habit: Herb. Habitat: Shady forest, 900–2750 m. Voucher: Mabberley 486 (EA).

***Cribbia brachyceras* (Summerh.) Sengha** Habit: Epiphyte. Habitat: Warm forest near river streams, 1700–2000 m. Voucher: SAJIT 006888 (EA, HIB).

***Cynorkis anacamptoides* Kraenzl.** Habit: Herb. Habitat: Upland moorland and grassland, 2250–3350 m. Vouchers: Dale 3444 (EA), Thulin & Tidigs 190 (EA).

***Cynorkis kassneriana* Kraenzl** Habit: Epiphyte. Habitat: Upland rain forest, on mossy banks, 1600–2580 m. Voucher: Kirk 9418 (EA)

***Diaphananthe robrii* (Rchb. f.) Summerh.** Habit: Epiphyte. Habitat: Dry highland forest, above 2000 m. Voucher: FOKP 11264 (EA, HIB).

***Diaphananthe montana* (Piers) P.J. Cribb & J. Stewart** Habit: Epiphyte. Habitat: Bushland, roots on moss and lichen, 2300–2750 m. Voucher: Stewart 1010 (EA).



- Diaphananthe pulchella* **Summerh.** Habit: Epiphyte. Habitat: Dry forest, 1500–2330 m. Voucher: FOKP 11260 (EA, HIB).
- Disa aconitoides* subsp. *goetzeana* (**Kraenzl.**) **H.P. Linder** Habit: Herb. Habitat: Grassland, 2300–2550 m. Voucher: Webster 9036 (EA).
- Disa fragrans* subsp. *deckenii* (**Rchb. f.**) **H.P. Linder** Habit: Herb. Habitat: Grassland 2300–3350 m. Vouchers: Thulin & Tidigs 205 (EA), Dale 3251 (EA).
- Disa erubescens* **Rendle** Habit: Herb. Habitat: Short upland grass, 1350–2550 m. Vouchers: Lucas 161 (EA), Blake 2128 (EA).
- Disa concinna* **N.E. Br.** Habit: Herb. Habitat: Grassland, 1450–2800 m. Voucher: Napier 1938 (EA).
- Disa decknii* **Reichb. f.** Habit: Herb. Habitat: Grassland, 2100–3300 m. Voucher: Dale 3251 (EA).
- Disa hircicornis* **Rchb. f.** Habit: Herb. Habitat: Wet grassland and swamps, often near streams, 1700–2750 m. Voucher: Dale 3446 (EA).
- Disa stairsii* **Kraenzl.** Habit: Herb. Habitat: Alpine grassland, Moorland and swamps, 2100–3550 m. Vouchers: Dale 3267 (EA), Thulin & Tidigs 61 (EA).
- Disperis kilimanjarica* **Rendle** Habit: Herb. Habitat: Woodland, 2300–3000 m. Voucher: Mabberley & McCall 13 (EA).
- Disperis nemorosa* **Rendle** Habit: Herb. Habitat: Mossy areas & leaf litter, 1800–2850 m. Voucher: Dale 34431 (EA).
- Epipactis africana* **Rendle** Habit: Herb. Habitat: River banks, 2330–2830 m. Voucher: Mabberley 221 (EA).
- Eulophia horsfallii* (**Bateman**) **Summerh.** Habit: Herb. Habitat: Swamps and river edges, 1500–2700 m. Vouchers: Symes 525 (EA), Webster 9040 (EA).
- Eulophia latilabris* **Summerh.** Habit: Herb. Habitat: Swampy grassland, 1500–2200 m. Voucher: FOKP 11261 (EA, HIB).
- Eulophia montis-elgonis* **Summerh.** Habit: Herb. Habitat: Swampy grassland, 2000–2350 m. Vouchers: Blake 2016 (EA), Webster 9043 (EA).
- Eulophia streptopetala* **Lindl.** Habit: Herb. Habitat: Grassland, 1350–2330 m. Voucher: SAJIT 007076 (EA, HIB).
- Eulophia taitensis* **Pfennig & P.J. Cribb** Habit: Herb. Habitat: Grassland, 1000–2500 m. Voucher: Archer 490 (EA).
- Eulophia petersii* (**Rchb. f.**) **Rchb. f.** Habit: Herb. Habitat: Grassland, Growing in sandy soil amongst *Sansevieria*, 0–2000 m. Vouchers: Tweedie 68 & 139 (EA).
- Eulophia pyrophila* (**Rchb. f.**) **Summerh.** Habit: Herb. Habitat: Grassland, 1000–2730 m. Voucher: Webster 9045 (EA).
- Habenaria altior* **Rendle** Habit: Herb. Habitat: Grassland, near streams, 1800–3500 m. Voucher: Dale 3447 (EA).
- Habenaria cirrhata* (**Lindl.**) **Rchb. f.** Habit: Herb. Habitat: Grassland, Scattered bushes, 300–1050 m. Voucher: Linday 157 (EA).
- Habenaria clavata* (**Lindl.**) **Rchb. f.** Habit: Herb. Habitat: Grassland, 1000–2730 m. Vouchers: Jex–Blake 2127 (EA), Agnew et al. 10580 (EA).

- Habenaria malacophylla* Rchb. f.** Habit: Herb. Habitat: Upland rain, grassland forest, 1350–2700 m. Vouchers: SAJIT 005091 (EA, HIB), FOKP 11645 (EA, HIB), Mbuni 645 (EA), Part II Botany 43 (EA).
- Habenaria walleri* Rchb. f.** Habit: Herb. Habitat: Swampy grassland, 1200–2300 m. Voucher: Webster 9027 (EA).
- Habenaria macruroides* Summerh.** Habit: Herb. Habitat: Open bushland, 1850–2200 m. Voucher: Tweedie 456 (EA).
- Habenaria holubii* Rolfe** Habit: Herb. Habitat: Swamp grassland, 1200–2300 m. Voucher: Blake 2127 (EA).
- Holothrix elgonensis* Summerh.** Habit: Herb. Habitat: Grassland, 3300–3500 m. Voucher: FOKP 11313 (EA, HIB).
- Holothrix brongniartiana* Rchb. f.** Habit: Herb. Habitat: Grassland, 2300–3200 m. Vouchers: Daicin 3442 (EA), Thulin & Tidigs 150 (EA).
- Holothrix pentadactyla* (Summerh.) Summerh.** Habit: Herb. Habitat: Upland grassland, open rocky ground, 2500–3500 m. Vouchers: Bally 5706 (EA), Townsend 2345 (EA), Jex–Blake 5706 (EA), Sharpe 5706 (EA), Stewart 1005 (EA).
- Liparis deistelii* Schltr.** Habit: Herb. Habitat: Mossy banks, tree trunks, 2000–2700 m. Vouchers: SAJIT 005094 (EA, HIB), Stewart 1099 (EA).
- Polystachya bella* Summerh.** Habit: Epiphyte. Habitat: High up in forest trees, 1800–2300 m. Vouchers: FOKP 11420 (EA), Mbuni 156 (EA).
- Polystachya bennettiana* Rchb. f.** Habit: Epiphyte. Habitat: Drier forest, 1650–2330 m. Vouchers: Webster 1981 & 9030 (EA).
- Polystachya bicarinata* Rendle** Habit: Epiphyte. Habitat: On river streams, 2350–2830 m. Vouchers: SAJIT 004826 & 005099 (EA, HIB), FOKP 11259 & 1012 (EA, HIB), Van Someren 8650 (EA).
- Polystachya campyloglossa* Rolfe** Habit: Epiphyte. Habitat: Highland forest, 1700–3000 m. Voucher: FOKP 11263 (EA, HIB).
- Polystachya cultriformis* (Thouars) Lindl. ex Spreng.** Habit: Epiphyte. Habitat: River banks, 330–2700 m. Vouchers: SAJIT 005095 (EA, HIB), Webster 9029 (EA).
- Polystachya eurychila* Summerh.** Habit: Epiphyte. Habitat: On rocks, 1830–2300 m. Voucher: Kirk & Irwin 50 (EA).
- Polystachya spatella* Kraenzl.** Habit: Epiphyte. Habitat: Highland forest, 2000–2830 m. Vouchers: FOKP 11646 (EA), Mbuni 646 (EA), Friis & Hansen 2510 (EA).
- Polystachya stricta* Rolfe** Habit: Epiphyte. Habitat: Highland forest, 2000–2830 m. Voucher: Webster 9030 (EA).
- Polystachya tenuissima* Kraenzl.** Habit: Epiphyte. Habitat: Highland forests, 1700–2500 m. Vouchers: SAJIT 005096 (EA, HIB), Tweedie 449 (EA).
- Roeperocharis bennettiana* Rchb. f.** Habit: Epiphyte. Habitat: Swamps, 2300–2800 m. Voucher: Dale 3445 (EA).
- Satyrium carsonii* Rolfe** Habit: Herb. Habitat: Open grassland, 2000–2330 m, Elgeyo open grassland. Vouchers: Napier 2126 (EA), Jex–Blake 2126 (EA).
- Satyrium coriophoroides* A. Rich.** Habit: Herb. Habitat: Grassland, 1700–2800 m. Vouchers: Symes 95 (EA), Tweedie 1589 (EA).



- Satyrium crassicaule* **Rendle** Habit: Herb. Habitat: Swamps, 1850–3300 m. Voucher: Webster 9034 (EA).
- Satyrium fimbriatum* **Summerh.** Habit: Herb. Habitat: Grassland, 2000–3300 m. Vouchers: Stewart 1000 (EA), Dale 3269 (EA), Lucas 163 (EA).
- Satyrium sceptrum* **Schltr.** Habit: Herb. Habitat: Grassland, 1700–2800 m. Voucher: Thulin 144 (EA).
- Satyrium schimperi* **Hochst. ex A. Rich.** Habit: Herb. Habitat: Grassland, 2300–3200 m. Vouchers: Irwin 426 (EA), Mainwaring 61 (EA).
- Satyrium yunnanense* **Rolfe** Habit: Herb. Habitat: Grassland, 1700–2800 m. Voucher: FOKP 11265 (EA, HIB).
- Stolzia repens* (**Rolfe**) **Summerh.** Habit: Epiphyte. Habitat: Riverine forest, 1950–2900 m. Voucher: FOKP 1094 (EA).
- Tridactyle anthomaniaca* (**Rchb. f.**) **Summerh.** Habit: Epiphyte. Habitat: Warm forest, above 1650 m. Voucher: SAJIT 004791 (EA, HIB).
- Tridactyle furcistripes* **Summerh.** Habit: Epiphyte. Habitat: highland forest, 2300–3100 m. Vouchers: Bally 2538 (EA), Tweedie 2173 (EA), Beentje 3055 (EA).
- Tridactyle nigrescens* **Summerh.** Habit: Epiphyte. Habitat: Riverine, Woodland, 1150–2200 m. Voucher: Jackson & Tweedie 3492 (EA).
- Tridactyle scottellii* (**Rendle**) **Schltr.** Habit: Epiphyte. Habitat: Rocky grassland and highland forest, 2230–3000 m. Voucher: Beentje 3050 (EA).

## F25. Hypoxidaceae

1 Genus, 5 species

- Hypoxis angustifolia* **Lam.** Habit: Herb. Habitat: Grassland in upland, 1300–3000 m. Vouchers: Napier 1907 (EA), Symes 44 & 286 (EA).
- Hypoxis kilimanjarica* **Baker** Habit: Herb. Habitat: Grassland, 2900–3250 m. Voucher: Thulin & Tidigs 201 (EA).
- Hypoxis obtusa* **Burch. ex Ker Gawl.** Habit: Herb. Habitat: Burnt grassland, 1800–2500 m. Vouchers: Agnew 10484 (EA), Napier 1942 (EA), Symes 287 (EA), Webster 9022 (EA).
- Hypoxis urceolata* **Nel** Habit: Herb. Habitat: Grassland, 1300–3000 m. Voucher: Symes 51 (EA).
- Hypoxis goetzei* **Harms** Habit: Herb. Habitat: Burnt grassland, 1830–1920 m. Voucher: Symes 285 (EA).

## F26. Iridaceae

7 Genera, 14 Species

- Aristea abyssinica* **Pax.** Habit: Herb. Habitat: Wet grassland, 1700–3500 m. Voucher: Tweedie 2985 (EA).
- Aristea abyssinica* **Pax** Habit: Herb. Habitat: Grassland, 2200–2850 m. Voucher: Blake 3108 (EA).

- Aristea cognata* N.E. Br. ex Weim. Habit: Herb. Habitat: Grassland, 2200–2850 m. Voucher: Symes 155 (EA).
- Dierama cupuliflorum* Klatt Habit: Herb. Habitat: Grassland, 2400–3500 m. Voucher: Thulin & Tidings 207 (EA).
- Dierama pendulum* (L. f.) Baker Habit: Herb. Habitat: Grassland, 2400–3500 m. Voucher: Lucas 216 (EA).
- Freesia laxa* (Thunb.) Goldblatt & J.C. Manning Habit: Herb. Habitat: Rocky grassland, 1700–3500 m. Voucher: Lucas 188 (EA).
- Gladiolus dalenii* Van Geel Habit: Herb. Habitat: Damp upland grassland, 1200–3100 m. Voucher: Maas 4690 (EA).
- Gladiolus dichrous* (Bullock) Goldblatt Habit: Herb. Habitat: Stony highland grassland, 2592–3050 m. Voucher: Mabberley & MacCall 151 (EA).
- Gladiolus schweinfurthii* (Baker) Goldblatt & M.P. de Vos Habit: Herb. Habitat: Montane grassland, 1830–2290 m. Voucher: Dale 3449 (EA).
- Gladiolus watsonioides* Baker. Habit: Herb. Habitat: Bamboo and alpine zone, 2400–3550 m. Voucher: FOKP 1812 (EA, HIB).
- Hesperantha petitiana* (A. Rich.) Baker Habit: Herb. Habitat: Subalpine and alpine grassland, 1520–3500 m. Voucher: Thulin & Tidings 216 (EA).
- Morea thomsonii* Baker Habit: Herb. Habitat: Stony grassland, 1400–1920 m. Voucher: Symes 296 (EA).
- Romulea camerooniana* Baker Habit: Herb. Habitat: Subalpine, 1520–3500 m. Voucher: Maas 6040 (EA).
- Romulea fischeri* Pax Habit: Herb. Habitat: Wet upland, 1520–3500 m. Voucher: Thulin & Tidings 110 (EA), Dowson 619 (EA).

## F27. Xanthorrhoeaceae

2 Genera, 5 species

- Aloe cheranganiensis* S. Carter & Brandham Habit: Shrub. Habitat: Dry scrub, bushed grassland when open, 1200–1900 m. Voucher: Brandham 1727 (EA).
- Aloe dawei* A. Berger Habit: Shrub. Habitat: Rocky bushland, 1830–2120 m. Voucher: FOKP 11326 (EA, HIB).
- Aloe penduliflora* Baker Habit: Shrub. Habitat: Rocky ground, 2100–2500 m. Vouchers: FOKP 11675 (EA), Mbuni 675 (EA).
- Aloe secundiflora* Engl. Habit: Shrub. Habitat: Sandy soils in drier areas, 900–1800 m. Vouchers: Spoerry 2 & 14 (EA).
- Kniphofia thomsonii* Baker Habit: Herb. Habitat: Highland grassland, 1900–3550 m. Vouchers: SAJIT 005116 (EA, HIB), Mabberley & MacCall 251 (EA), Lucas 212 (EA).

## F28. Amaryllidaceae

2 Genera, 2 Species

- Allium neapolitanum* Cirillo Habit: Herb. Habitat: Upland grassland, 1500–2500 m. Vouchers: FOKP 11299 (EA, HIB), Mbuni 035 (EA, HIB).



***Scadoxus multiflorus* (Martyn) Raf.** Habit: Herb. Habitat: Rocky places in forest edges, riverine forest, 5–2250 m. Voucher: SAJIT 007081 (EA, HIB).

## F29. Asparagaceae

5 Genera, 10 Species

***Anthericum angustifolium* Hochst. ex A. Rich.** Habit: Herb. Habitat: Grassland, 1980–2450 m. Voucher: Blake 1896 (EA).

***Asparagus africanus* Lam.** Habit: Shrub. Habitat: Bushy wooded, 100–2680 m. Voucher: Symes 281 (EA).

***Asparagus falcatus* L.** Habit: Climber. Habitat: Upland forest, Woodland, 10–2750 m. Vouchers: FOKP 11699 (EA), Mbuni 699 (EA).

***Asparagus racemosus* Willd.** Habit: Climber. Habitat: Drier bushland 1160–2800 m. Vouchers: FOKP 954, 1018, 11288 & 11699 (EA, HIB), Mbuni 024 & 699 (EA), Webster 9000 (EA), Mus 114 (EA).

***Chlorophytum cameronii* (Baker) Kativu** Habit: Herb. Habitat: Highland grassland, 1675–2450 m. Voucher: Symes 97 (EA).

***Chlorophytum cameronii* var. *pterocaulon* (Welw. ex Baker) Nordal** Habit: Herb. Habitat: Highland grassland, 1675–2450 m. Vouchers: FOKP 11689 (EA), Mbuni 689 (EA), Symes 36 (EA).

***Chlorophytum affine* Baker** Habit: Herb. Habitat: Dry bushland, 15–1980 m. Vouchers: Symes 609 (EA), Napier & Tweedie 2119 (EA).

***Dracaena ellenbeckiana* Engl.** Habit: Tree. Habitat: Bushland, 1050–1950 m. Voucher: SAJIT 005050 (EA, HIB).

***Dracaena afromontana* Mildbr.** Habit: Tree. Habitat: Bamboo forest, 1900–2400 m. Vouchers: FOKP 1070, 11398 & 11522 (EA), Mbuni 134 & 258 (EA), Oteke 97 (EA).

***Ornithogalum gracillimum* R.E. Fr.** Habit: Herb. Habitat: Grassland, 1800–2700 m. Voucher: SAJIT 005076 (EA, HIB).

## F30. Commelinaceae

5 Genera, 11 Species

***Aneilema recurvatum* Faden** Habit: Herb. Habitat: Grassland, 700–1300 m. Voucher: Faden 78 (EA).

***Aneilema sebitense* Faden** Habit: Herb. Habitat: Woodland, 1500–1550 m. Vouchers: Faden 803A (EA), Mabberley & McCall 88 & 88A (EA).

***Aneilema zebrinum* Chiov. ex Chiarugi.** Habit: Herb. Habitat: Woodland, 10–1150 m. Voucher: Faden et al. 888 (EA).

***Cyanotis barbata* D. Don** Habit: Herb. Habitat: Grassland, 1650–3200 m. Vouchers: Stewart 1008 (EA), Symes 617 (EA).

***Commelina africana* var. *krebsiana* (Kunth) C.B. Clarke** Habit: Herb. Habitat: Grassland, 700–2300 m. Voucher: Lye 907 (EA).

***Commelina benghalensis* L.** Habit: Herb. Habitat: Grassland, bushland, disturbed habitats, 10–2200 m. Vouchers: FOKP 11415 (EA), Mbuni 151 (EA).

***Commelina foliacea* Chiov.** Habit: Herb. Habitat: Grassland, 350–1550 m. Vouchers: Faden 807 (EA), Mabberley & McCall 88 (EA).

***Commelina imberbis* Ehrenb. ex Hassk.** Habit: Herb. Habitat: Cultivated ground, disturbed habitat, 1000–1750 m. Voucher: Faden 805 (EA).

***Commelina triangulispata* Mildbr.** Habit: Herb. Habitat: Moist roadside banks, 1650–2300 m. Vouchers: Tweedie 4083 (EA), Faden & Evans 487 (EA).

***Floscopa glomerata* (Willd. ex Schult. & Schult. f.) Hassk.** Habit: Herb. Habitat: Standing water in forest, 1650–2200 m. Vouchers: Ivens 1251 (EA), Webster 8995 (EA).

***Murdannia edulis* (Stokes) Faden** Habit: Herb. Habitat: Grassland, bushland, 900–1300 m. Voucher: Maas 6373 (EA).

### F31. Eriocaulaceae

1 Genus, 3 Species

***Eriocaulon abyssinicum* Hochst.** Habit: Herb. Habitat: Wet shallow soils, 1650–2730 m. Voucher: SAJIT 005160 (EA, HIB).

***Eriocaulon inyangense* Arw.** Habit: Herb. Habitat: Swamps in grassland, around 900 m. Voucher: Townsend 1435 (EA).

***Eriocaulon schimperi* Körn. ex Ruhland** Habit: Herb. Habitat: Heath zones, 2440–3100 m. Vouchers: SAJIT 006822 (EA, HIB), FOKP 945, 1133, 1243 & 10922, (EA, HIB), Fries & Hansen 2533 (EA), Rauh 678 (EA).

### F32. Juncaceae

2 Genera, 5 Species

***Juncus dregeanus* Kunth** Habit: Herb. Habitat: Upland and alpine forest, 2900–3300 m. Vouchers: FOKP 1148 (EA, HIB), Bogdan 4991 (EA).

***Juncus effusus* L.** Habit: Herb. Habitat: Highland and moorland forest, 1500–3300 m. Voucher: FOKP 1151 (EA, HIB).

***Juncus oxycarpus* E. Mey. ex Kunth** Habit: Herb. Habitat: Upland streamsides and alpine seepage zones, 1500–2750 m. Vouchers: FOKP 1241 (EA, HIB), Verdcourt 2435 (EA).

***Luzula abyssinica* Parl.** Habit: Herb. Habitat: High forest streamsides and wet alpine, 2000–3500 m. Voucher: Bogdan 10100 (EA).

***Luzula johnstonii* Buchenau** Habit: Herb. Habitat: Alpine wet grassland, 2400–3500 m. Vouchers: Thulin & Tidigs 244 (EA), Mabberley 193 (EA).

### F33. Cyperaceae

9 Genera, 40 Species

***Bulbostylis densa* subsp. *afromontana* (Lye) R.W. Haines** Habit: Herb. Habitat: Shallow soils, 1500–3000 m. Voucher: Knight 71 (EA).

***Carex bequaertii* De Wild.** Habit: Herb. Habitat: Alpine grassland and montane swamps, 2300–3500 m. Voucher: Thulin & Tidigs 49 (EA).



- Carex chlorosaccus* **C.B. Clarke** Habit: Herb. Habitat: Swampy edges, 1500–3300 m. Vouchers: Lye 9125 (EA), Gehrke & Muasya 165 (EA).
- Carex erythrorrhiza* **Boeckeler** Habit: Herb. Habitat: Streams, 2500–3500 m. Voucher: Kirk 9887 (EA).
- Carex elgonensis* **Nelmes** Habit: Herb. Habitat: Alpine swamps, 1500–3300 m. Voucher: Part II Botany 75 (EA).
- Carex johnstonii* **Boeckeler** Habit: Herb. Habitat: High forest edges, 2200–3300 m. Voucher: Thulin & Tidigs 48 (EA).
- Carex lycurus* **K. Schum. ex Engl.** Habit: Herb. Habitat: Montane river-sides, 1950–3300 m. Voucher: Thulin 50 (EA).
- Carex mannii* **E.A. Bruce** Habit: Herb. Habitat: Montane forest grades, 2200–3300 m. Voucher: Gehrke & Muasya 167 (EA).
- Carex monostachya* **A. Rich.** Habit: Herb. Habitat: Disturbed bushland, alpine openings, above 2700 m. Voucher: Kirk 58 (EA).
- Carex peregrina* **Link** Habit: Herb. Habitat: Common in alpine around, 2300 m. Voucher: Thulin & Tidigs 112 (EA).
- Carex petitiana* **A. Rich.** Habit: Herb. Habitat: Montane forest grades, 2500–3500 m. Voucher: Beentje 212 (EA).
- Carex steudneri* **Boeckeler** Habit: Herb. Habitat: Grassland & woodland edges, 2300–3000 m. Voucher: Bogdan 4972 (EA).
- Carex simensis* **Hochst. ex A. Rich.** Habit: Herb. Habitat: Alpine grassland, 1900–3500 m. Voucher: Thulin 243 (EA).
- Cyperus aterrimus* **Hochst. ex Steud.** Habit: Herb. Habitat: Alpine grassland, 1900–3500 m. Voucher: Ivens 1246 (EA).
- Cyperus alternifolius* **L.** Habit: Herb. Habitat: Montane forest, 2200–3300 m. Vouchers: Agnew et al. 10458 (EA), Mus 244 (EA), Mbuni 683 (EA).
- Cyperus cyperoides* **(L.) Kuntze** Habit: Herb. Habitat: Montane forest, 1600–3500 m. Voucher: Hanson & Thomasson 57 (EA).
- Cyperus distans* **L.** Habit: Herb. Habitat: Temporary water, marshes and ferns up to 2500 m. Voucher: Ivens 1247 (EA).
- Cyperus derreilema* **Steud.** Habit: Herb. Habitat: Upland forest and streamsides, 2000–3000 m. Voucher: Ivens 1245 (EA).
- Cyperus dichrostachyus* **Hochst. ex A. Rich.** Habit: Herb. Habitat: Highland swamps, 1200–2400 m. Vouchers: SAJIT 004745 (EA, HIB), FOKP 997 & 1152 (EA, HIB).
- Cyperus involucratus* **Rottb.** Habit: Herb. Habitat: Upland forest, 1800–3000 m. Voucher: Lugard 2793 (EA).
- Cyperus impubes* **Steud.** Habit: Herb. Habitat: Forest shade, 1400–2500 m. Voucher: Maas 4701 (EA).
- Cyperus iria* **L.** Habit: Herb. Habitat: Disturbed wet forests, 1000–1500 m. Voucher: Bogdan 5169 (EA).
- Cyperus kerstenii* **Boeckeler** Habit: Herb. Habitat: Alpine, Moorland 2500–3500 m. Voucher: Smith et al, 194 (EA).
- Cyperus mollipes* **(C.B. Clarke) K. Schum.** Habit: Herb. Habitat: Grassland, 100–2750 m. Voucher: Bogdan 4528 (EA).

- Cyperus cruentus* Rottb.** Habit: Herb. Habitat: Grassland, 500–2000 m. Voucher: Leippert 5116 (EA).
- Cyperus nutans* var. *eleusinoides* (Kunth) Haines** Habit: Herb. Habitat: streamside, swampy areas, 1000–2200 m. Voucher: Bogdan 5308 (EA).
- Cyperus platycaulis* Baker** Habit: Herb. Habitat: Wet areas, 1000–3000 m. Vouchers: FOKP 980 & 1134 (EA, HIB), Smith, Beentje & Muasya 208 (EA), Botany 2 Exp. 74 (EA).
- Cyperus rotundus* L.** Habit: Herb. Habitat: Grassland, Up to 2000 m. Vouchers: Mbuni 014 (EA), FOKP 11278 (EA).
- Cyperus schimperianus* Steud.** Habit: Herb. Habitat: River-side swamps, Sandy, stony river banks, grassland, 450–1600 m. Voucher: Thomas 2117 (EA).
- Cyperus squarrosus* L.** Habit: Herb. Habitat: Wet pool edges, up to 2000 m. Voucher: Leippert 5041 (EA).
- Fimbristylis dichotoma* (L.) Vahl** Habit: Herb. Habitat: Grassland, up to 2000 m. Voucher: Bogdan 4960 (EA).
- Fuirena stricta* subsp. *chlorocarpa* (Ridl.) Lye** Habit: Herb. Habitat: Wet grassland, 500–2800 m. Voucher: Bogdan 4992 (EA).
- Isolepis costata* Hochst. ex A. Rich.** Habit: Herb. Habitat: Alpine, Sedge in dense growth, 1700–3500 m. Voucher: Bogdan 4990 (EA).
- Isolepis fluitans* (L.) R. Br.** Habit: Herb. Habitat: Montane water, 1300–3500 m. Voucher: Thulin & Tidigs 97 (EA).
- Kyllinga alba* Nees** Habit: Herb. Habitat: Dry bushland, 500–2500 m. Voucher: Napper & Tweedie 2124 (EA).
- Kyllinga brevifolia* Rottb** Habit: Herb. Habitat: Streamside, 1600–3000 m. Vouchers: FOKP 11731 (EA), Mbuni 731 (EA).
- Kyllinga odorata* Vahl** Habit: Herb. Habitat: Streamside, 1300–3300 m. Vouchers: Smith et al. 196 (EA), Bogdan 5002 (EA).
- Pycnus elegantulus* (Steud.) C.B. Clarke** Habit: Herb. Habitat: Grassland, 1000–2200 m. Vouchers: FOKP 990 & 1130 (EA, HIB).
- Kyllinga pulchella* Kunth** Habit: Herb. Habitat: Woodland edge, 1500–2600 m. Voucher: Smith et al. 190 (EA).
- Schoenoplectus corymbosus* (Roth ex Roem. & Schult.) J. Raynal** Habit: Herb. Habitat: Grassland, 1000–2500 m. Vouchers: FOKP 984, 1141 (EA, HIB) Bogdan 5313 (EA), Muasya 1284 (EA).

#### F34. Poaceae

40 Genera, 59 Species

- Agrostis kilimandscharica* Mez.** Habit: Herb. Habitat: Bamboo and upland, 2000–3500 m. Voucher: Bogdan 4974 (EA).
- Agrostis producta* Pilg.** Habit: Herb. Habitat: Upland grassland & moorland 2500–3500 m, Vouchers: Bogdan 4977 (EA), Thulin et al. 256 (EA).



- Agrostis quinqueseta* (Steud.) Hochst. Habit: Herb. Habitat: Moorland & alpine, 3000–3500 m. Voucher: Bogdan 4973 (EA).
- Aira caryophyllea* L. Habit: Herb. Habitat: Grassland and moorland above 2000 m. Vouchers: Bogdan 4989 (EA), Braun 582 (EA).
- Andropogon amethystinus* Steud. Habit: Herb. Habitat: Alpine grassland, 2000–3550 m. Vouchers: Thulin & Tidigs 225 (EA), Braun 581 (EA).
- Andropogon chinensis* (Nees) Merr. Habit: Herb. Habitat: Savannah and bushland, 0–1800 m. Voucher: Bogdan 3829 (EA).
- Andropogon schirensis* Hochst. Habit: Herb. Habitat: Grassland, 2000–3500 m. Voucher: Strange 82 (EA).
- Antheophora nigritana* Stapf & C.E. Hubb. Habit: Herb. Habitat: Rocky bushland, 1200–1700 m. Vouchers: Bogdan 3407 & 5633 (EA).
- Anthoxanthum nivale* K. Schum. Habit: Herb. Habitat: Upland grassland & moorland, above 2500 m. Vouchers: Bogdan 4971 & Bogdan 4997 (EA).
- Aristida adscensionis* L. Habit: Herb. Habitat: Bushland, 1500–2500 m. Voucher: Bogdan 5632 (EA).
- Aristida hordeacea* Kunth Habit: Herb. Habitat: Bushland, 400–1600 m. Voucher: Bogdan 3414 (EA).
- Bothriochloa radicans* (Lehm.) A. Camus Habit: Herb. Habitat: Deciduous bushland, 0–2000 m. Voucher: Bogdan 3413 (EA).
- Brachiaria scalaris* Pilg. Habit: Herb. Habitat: Upland weedy places, 900–2400 m. Vouchers: Bogdan 5306 (EA), Baner 481 (EA).
- Brachypodium flexum* Nees Habit: Herb. Habitat: Upland forest, 2000–3000 m. Voucher: Bogdan 4870 (EA).
- Cymbopogon giganteus* Chiov. Habit: Herb. Habitat: Bushland, 0–2300 m. Voucher: Bogdan 3854 (EA).
- Digitaria gayana* (Kunth) A. Chev. Habit: Herb. Habitat: Disturbed place, farmland, 1200–2000 m. Voucher: Bogdan 4337 (EA).
- Digitaria velutina* (Forssk.) P. Beauv. Habit: Herb. Habitat: Disturbed places, 0–2300 m. Voucher: Baner 480 (EA).
- Dinebra retroflexa* (Vahl) Panz. Habit: Herb. Habitat: Black clay soils, 500–2000 m. Voucher: Pratt 5716 (EA).
- Ehrharta erecta* Lam. Habit: Herb. Habitat: Forest clearing, 1500–2700 m. Voucher: Bogdan 5305 (EA).
- Eragrostis cylindriflora* Hochst. Habit: Herb. Habitat: Dry bushland, 1200–2000 m. Voucher: Bogdan 3422 (EA).
- Eragrostis patens* Oliv. Habit: Herb. Habitat: Dry land area, 400–2000 m. Voucher: Bogdan 3423 (EA).
- Eragrostis tremula* Hochst. ex Steud. Habit: Herb. Habitat: Grassland, 0–1600 m. Voucher: Bogdan 4492 (EA).
- Exothea abyssinica* (Hochst. ex A. Rich.) Andersson Habit: Herb. Habitat: Upland and montane grassland, 2000–3550 m. Voucher: Strange 85 (EA).

- Festuca abyssinica* **A. Rich.** Habit: Herb. Habitat: Highland grassland and moorland, 2000–3000 m. Voucher: Heady 1415 (EA).
- Hyparrhenia pilgeriana* **C.E. Hubb.** Habit: Herb. Habitat: Swamps, 1000–2700 m. Voucher: Bogdan 4513 (EA).
- Hyparrhenia variabilis* **Stapf.** Habit: Herb. Habitat: Deciduous bushland, wooded grassland, 600–2200 m. Voucher: Bogdan 3635 (EA).
- Koeleria capensis* **Nees** Habit: Herb. Habitat: Upland Grassland and moorland, 2000–3550 m. Voucher: Thulin & Tidigs 249 (EA).
- Leersia hexandra* **Sw.** Habit: Herb. Habitat: Shallow water and swamps, up to 2000 m. Voucher: Ivens 1283 (EA).
- Leptochloa rupestris* **C.E. Hubb.** Habit: Herb. Habitat: Deciduous bushland, rocky places, 1600–1900 m. Voucher: Bogdan 3844 (EA).
- Loudetia flavida* (**Stapf**) **C.E. Hubb.** Habit: Herb. Habitat: Dry bushland, 300–1600 m. Voucher: Deg 32 (EA).
- Loudetia kagerensis* (**K. Schum.**) **C.E. Hubb.** Habit: Herb. Habitat: Stony soil, 1200–2700 m. Voucher: Kuchar 8653 (EA).
- Microchloa indica* (**L. f.**) **P. Beauv.** Habit: Herb. Habitat: Low altitude, shallow soil, 800–1600 m. Voucher: Bogdan 5171 (EA).
- Melinis repens* (**Willd.**) **Zizka** Habit: Herb. Habitat: Grassland, 0–2500 m. Voucher: FOKP 1034 (EA).
- Melinis nerviglumis* (**Franch.**) **Zizka** Habit: Herb. Habitat: Upland grassland and open woodland, 500–2000 m. Voucher: Bogdan 3426 (EA).
- Oplismenus compositus* (**L.**) **P. Beauv.** Habit: Herb. Habitat: Evergreen grassland, 0–2400 m. Voucher: Bogdan 4952 (EA).
- Oplismenus hirtellus* (**L.**) **P. Beauv.** Habit: Herb. Habitat: Forest shade, 0–2500 m. Voucher: Bogdan 4952 (EA).
- Oplismenus undulatifolius* (**Ard.**) **Roem. & Schult.** Habit: Herb. Habitat: Forest shade, 1400–2500 m. Voucher: Mabberley & McCall 60 (EA).
- Oropetium minimum* (**Hochst.**) **Pilg.** Habit: Herb. Habitat: Open deciduous, dry grassland, 780–2600 m. Voucher: Bogdan 4948 (EA).
- Oropetium thomaeum* (**L. f.**) **Trin.** Habit: Herb. Habitat: Deciduous grassland, 500–1100 m. Voucher: Bogdan 4949 (EA).
- Panicum atosanguineum* **Hochst. ex A. Rich.** Habit: Herb. Habitat: Dry bushland, 100–2200 m. Voucher: Baner 482 (EA).
- Panicum pusillum* **Hook. f.** Habit: Herb. Habitat: Grassland, moorland, Streams, 1300–3300 m. Voucher: Bogdan 5299 (EA).
- Panicum hochstetteri* **Steud.** Habit: Herb. Habitat: Drier in forest shade, 1500–3000 m. Voucher: Bogdan 3835 (EA).
- Panicum hymeniophilum* **Nees.** Habit: Herb. Habitat: Wet places, 1000–3000 m. Vouchers: Thulin & Tidigs 180, Thulin et al. 161 (EA).
- Pennisetum macrourum* **Trin.** Habit: Herb. Habitat: River banks & Streams, 700–2300 m. Voucher: Bogdan 3637 (EA).



- Pennisetum sphacelatum* (Nees) T. Durand & Schinz.** Habit: Herb. Habitat: Bushland, 1500–3200 m. Voucher: Thulin & Tidigs 277 (EA).
- Pennisetum squamulatum* Fresen.** Habit: Herb. Habitat: Deciduous bushland, 300–1600 m. Voucher: Bogdan 3833 (EA).
- Pogonarthria squarrosa* (Roem. & Schult.) Pilg.** Habit: Herb. Habitat: Open moorland, 500–2000 m. Voucher: Bogdan 3447 (EA).
- Pogonarthria squarrosa* (Roem. & Schult.) Pilg.** Habit: Herb. Habitat: Sandy grassland and open woodland, 500–1870 m. Voucher: Bogdan 3447 (EA).
- Polypogon schimperianus* (Hochst. ex Steud.) Cope** Habit: Herb. Habitat: Moorland & alpine, 3000–3500 m. Voucher: Ivens 1244 (EA).
- Sacciolepis africana* C.E. Hubb. & Snowden.** Habit: Herb. Habitat: Shallow water up to 1600 m. Voucher: Knight 5309 (EA).
- Sacciolepis indica* (L.) Chase** Habit: Herb. Habitat: streamside marshes, 1000–2200 m. Voucher: Bogdan 5309 (EA).
- Schmidtia pappophoroides* Steud. ex J.A. Schmidt** Habit: Herb. Habitat: Bushland, 200–2000 m. Voucher: Bogdan 3845 (EA).
- Setaria orthosticha* K. Schum. ex R.A.W. Herrm.** Habit: Herb. Habitat: Evergreen grassland, 1000–2300 m. Voucher: Bogdan 3851 (EA).
- Sporobolus panicoides* A. Rich.** Habit: Herb. Habitat: Deciduous bushland, 1100–2000 m. Voucher: Bogdan 3884 (EA).
- Stipa keniensis* (Pilg.) Freitag** Habit: Herb. Habitat: Upland forest shade and road sides, 2000–2700 m. Voucher: Bogdan 500 (EA).
- Streblochaete longiarista* (A. Rich.) Pilg.** Habit: Herb. Habitat: forest shade & bamboo clearing, 1500–3000 m. Voucher: Thorold 2758 (EA).
- Urochloa oligotricha* (Fig. & De Not.) Henrard.** Habit: Herb. Habitat: Wooded grassland, 1300–2000 m. Voucher: Bogdan 3409 (EA).
- Vulpia bromoides* (L.) Gray** Habit: Herb. Habitat: Rocky soils, 2500–3500 m. Vouchers: Verdcourt 2439A (EA), Taylor et al. 2439 (EA).
- Yushania alpina* (K. Schum.) W.C. Lin** Habit: Herb. Habitat: Montane forest 3000–3300 m. Voucher: Davidse 9224 (EA).

### F35. Papaveraceae

1 Genus, 1 Species

- Corydalis mildbraedii* Fedde** Habit: Herb. Habitat: Grassland, 2200–3500 m. Voucher: Thulin et al. 235 (EA).

### F36. Menispermaceae

2 Genera, 2 Species

- Cissampelos pareira* L.** Habit: Herb. Habitat: Woodland, 2–2600 m. Vouchers: FOKP 11289 & 11604 (EA, HIB), Mbuni 593 & 604 (EA).

***Stephania abyssinica* (Quart.-Dill. & A. Rich.) Walp.** Habit: Liana. Habitat: bushland, 1950–2600 m. Vouchers: SAJIT 005058 (EA, HIB), FOKP 934 (EA, HIB).

### F37. Berberidaceae

1 Genus, 1 Species

***Berberis holstii* Engl.** Habit: Shrub. Habitat: Upland bushland, 2150–3000 m. Voucher: SAJIT 007059 (EA, HIB).

### F38. Ranunculaceae

6 Genera, 9 Species

***Anemone thomsonii* Oliv.** Habit: Herb. Habitat: Grassland, 2500–3500 m. Vouchers: Bogdan 4994 (EA), Knox 3392 (EA).

***Clematis brachiata* Thunb.** Habit: Climber. Habitat: Wooded grassland, 720–3150 m. Vouchers: FOKP 11277 (EA, HIB), Webster 8708 (EA), Lind 5094 (EA), Ivens 1254 (EA).

***Clematis simensis* Fresen.** Habit: Climber. Habitat: Grassland 1600–3250 m. Vouchers: FOKP 993, 1022 & 11512 (EA, HIB), Mbuni 248 (EA), Lind 2851 (EA), Knox 3857 (EA), Mabberley et al. 227 (EA).

***Clematis villosa* DC.** Habit: Herb. Habitat: Grassland, 1600–3250 m Vouchers: Symes 42 (EA), Webster 8710 (EA).

***Delphinium macrocentrum* Oliv.** Habit: Herb. Habitat: grassland, 1650–3500 m. Vouchers: FOKP 11387 (EA, HIB), Lind 5099 (EA), Mabberley 235 (EA).

***Ranunculus multifidus* Forssk.** Habit: Herb. Habitat: streamside, 1350–3450 m. Vouchers: FOKP 1137, 1207 & 11360 (EA, HIB), Mbuni 096 (EA), Mabberley & McCall 213 (EA), Thulin et al. 78 (EA).

***Ranunculus oreophytus* Delile** Habit: Herb. Habitat: streamside, 2550–3500 m. Vouchers: Knox 3383 (EA), Trelawny 4385 (EA).

***Ranunculus volkensii* Engl.** Habit: Herb. Habitat: Grassland, 2550–3400 m. Vouchers: Thulin & Tidigs 194 (EA), Knox 3382 (EA).

***Thalictrum rhynchocarpum* Dillon & A. Rich** Habit: Herb. Habitat: Upland forest, 1550–3275 m. Vouchers: SAJIT 005057 (EA, HIB), FOKP 11533 (EA), Mbuni 269 (EA), Mabberley & McCall 188 (EA).

### F39. Proteaceae

2 Genera, 6 Species

***Faurea arborea* Engl.** Habit: Tree. Habitat: Wooded grassland, 1600–2400 m. Voucher: Thulin & Tidings 181 (EA).

***Faurea rochetiana* (A. Rich.) Chiov. ex Pic. Serm.** Habit: Tree. Habitat: Wooded grassland, 1600–2400 m. Vouchers: FOKP 11325 (EA, HIB), Birch 61 & 178 (EA).



***Faurea saligna* Harv.** Habit: Tree. Habitat: Wooded grassland, 1600–2400 m. Vouchers: SAJIT 004766 (EA, HIB), FOKP 1092 & 11268 (EA, HIB), Mbuni 004 (EA), Trapnell 2301 (EA), Botany Part II 61 (EA), Buch 178 (EA).

***Protea caffra* subsp. *kilimandscharica* (Engl.) Chisumpa & Brummitt** Habit: Shrub. Habitat: Moorland, 2500–3500 m. Voucher: Dale 862 (EA).

***Protea gagedi* J.F. Gmel.** Habit: Tree. Habitat: Grassland bushland, 1500–2900 m. Vouchers: SAJIT 005146 (EA, HIB), FOKP 11275 (EA), Mbuni 014 (EA), Thulin & Tidigs 73 (EA), Napper 1504 (EA).

***Protea madiensis* Oliv.** Habit: Shrub. Habitat: Wooded grassland, 1650–1900 m. Voucher: Buch 161 (EA).

#### F40. Gunneraceae

1 Genus, 1 Species

***Gunnera perpensa* L.** Habit: Herb. Habitat: River-side marshes, 2300–3370 m. Voucher: Tweedie 3014 (EA).

#### F41. Crassulaceae

5 Genera, 16 Species

***Bryophyllum pinnatum* (Lam.) Oken** Habit: Herb. Habitat: Grassland, 1000–2100 m. Voucher: Symes 2799 (EA).

***Crassula alata* (Viv.) A. Berger** Habit: Herb. Habitat: Grassland, 1350–2700 m. Voucher: Maas 6348 (EA).

***Crassula alba* Forssk.** Habit: Herb. Habitat: Grassland, 2439–3048 m. Vouchers: SAJIT 005115 & 004811 (EA, HIB), Dale 3271 (EA).

***Crassula alsinoides* (Hook. f.) Engl.** Habit: Herb. Habitat: Wet rocky, 1475–3500 m. Vouchers: SAJIT 006816 (EA, HIB), FOKP 10916 & 11530 (EA, HIB), Mbuni 266 (EA), Mabberley 572 (EA).

***Crassula granvikii* Mildbr.** Habit: Herb. Habitat: Alpine 1650–3500 m. Vouchers: FOKP 1214 & 11733 (EA, HIB), Mbuni 112 & 733 (EA), Thulin 204 (EA).

***Crassula schimperi* Fisch. & C.A. Mey.** Habit: Herb. Habitat: Upland grassland, 1050–3550 m. Voucher: SAJIT 004833 (EA).

***Crassula vaginata* Eckl. & Zeyh.** Habit: Herb. Habitat: Upland grassland, 2000–3500 m. Voucher: Lucas 214 (EA).

***Kalanchoe citrina* Schweinf.** Habit: Herb. Habitat: Bushland, 1150–2100 m. Voucher: Tweedie 1773 (EA).

***Kalanchoe crenata* (Andrews) Haw.** Habit: Herb. Habitat: Grassland, 1650–2300 m. Vouchers: SAJIT 006894 (EA, HIB), Symes 279 (EA).

***Kalanchoe densiflora* Rolfe** Habit: Herb; Habitat: Montane grassland, 1500–3000 m. Vouchers: SAJIT 006793 (EA, HIB), FOKP 11380 (EA), Mbuni 129 (EA), Thulin & Tidigs 85 (EA), Rauh 683 (EA).

***Kalanchoe glaucescens* Britten** Habit: Herb. Habitat: Bushland, 900–2200 m. Vouchers: FOKP 1279 (EA, HIB), Mortimer 207 (EA).

***Kalanchoe lanceolata* (Forssk.) Pers.** Habit: Herb. Habitat: Grassland, Dry areas, 950–2100 m. Vouchers: SAJIT 006899 (EA, HIB), Tweedie 1774 (EA).

***Kalanchoe prittwitzii* Engl.** Habit: Herb. Habitat: Bushland, 1650–2300 m. Voucher: SAJIT 006845 (EA, HIB).

***Sedum meyeri-johannis* Engl.** Habit: Herb. Habitat: Heartland, 2100–3150 m. Vouchers: SAJIT 006824 (EA, HIB), FOKP 10924 (EA, HIB).

***Sedum ruwenzoriense* Baker f.** Habit: Herb. Habitat: Upland heartland, 2800–3500 m. Vouchers: Mabberley & McCall 230 (EA), Symes 649 (EA).

***Umbilicus botryoides* Hochst. ex A. Rich.** Habit: Herb. Habitat: Montane forest, 2250–3500 m. Voucher: SAJIT 004850 (EA).

#### F42. Haloragaceae

1 Genus, 1 Species

***Laurembergia tetrandra* (Schott) Kanitz** Habit: Herb. Habitat: Wet grassland at streamside, 2000–2350 m. Vouchers: SAJIT 006823 (EA, HIB), FOKP 10923 (EA, HIB).

#### F43. Vitaceae

4 Genera, 14 Species

***Ampelocissus africana* (Lour.) Merr.** Habit: Liana. Habitat: Riverine, woodland, 1450–1800 m. Voucher: Napier 2000 (EA).

***Cissus petiolata* Hook. f.** Habit: Liana. Habitat: Riverine forest, 1050–1800 m. Voucher: Balley 12355 (EA).

***Cissus rotundifolia* Vahl** Habit: Shrub. Habitat: *Acacia–Commiphora* bushland, 0–2100 m. Voucher: SAJIT Z0041 (EA, HIB).

***Cissus ruspolii* Gilg** Habit: Climber. Habitat: Bushland, 1300–1620 m. Voucher: Meyerhoff 102 (EA).

***Cyphostemma bambuseti* (Gilg & M. Brandt) Desc. ex Wild & R.B. Drumm.** Habit: Climber. Habitat: Dry upland forest, 1450–2400 m. Voucher: SAJIT 004750 (EA, HIB).

***Cyphostemma junceum* (Baker) Desc. ex Wild & R.B. Drumm.** Habit: Climber. Habitat: Grassland 1650–2280 m. Voucher: Symes 292 (EA).

***Cyphostemma cyphopetalum* (Fresen.) Desc. ex Wild & R.B. Drumm.** Habit: Climber. Habitat: Bushland, 470–2450 m. Vouchers: FOKP 11752 (EA), Mbuni 752 (EA), Symes 334 (EA).

***Cyphostemma dysocarpum* (Gilg & M. Brandt) Desc.** Habit: Climber. Habitat: *Acacia–Commiphora* bushland, 1000–1600 m. Voucher: Lindsay 129 (EA).

***Cyphostemma heterotrichum* (Gilg & R.E. Fr.) Desc. ex Wild & R.B. Drumm.** Habit: Climber. Habitat: Grassland, 1600–2300 m. Vouchers: Napier 2028 (EA), Symes 103 (EA).



- Cyphostemma kilimandscharicum* (Gilg) Desc. ex Wild & R.B. Drumm. Habit: Climber. Habitat: Montane rain forest, 1600–3040 m. Voucher: SAJIT 005070 (EA, HIB).
- Cyphostemma maranguense* (Gilg) Desc. Habit: Climber. Habitat: Dry upland forest, 1600–3040 m. Voucher: FOKP 11276 (EA, HIB).
- Cyphostemma pseudosesquipedale* Verdc. Habit: Herb. Habitat: Grassland up to 1372 m. Voucher: Agnew et al. 10230 (EA).
- Cyphostemma Serpens* (Hochst. ex A. Rich.) Desc. Habit: Climber. Habitat: Bushed grassland, 1200–2550 m. Vouchers: SAJIT 006876 (EA, HIB), FOKP 11281 (EA, HIB).
- Rhoicissus tridentata* (L. f.) Wild & R.B. Drumm. Habit: Shrub. Habitat: Wooded, 60–2700 m. Vouchers: SAJIT 004846 (EA, HIB), FOKP 1108, 1262, 11280 & 11451 (EA, HIB), Mbuni 187 & 679 (EA).

#### F44. Zygophyllaceae

1 Genus, 1 Species

- Tribulus terrestris* L. Habit: Herb. Habitat: Waste places and trodden earth, 10–2300 m. Vouchers: FOKP 11488 (EA), Mbuni 224 (EA).

#### F45. Fabaceae

39 Genera, 98 Species

- Vachellia abyssinica* Benth. Habit: Tree. Habitat: Wooded grassland, 1450–3300 m. Vouchers: FOKP 11269 (EA), Mbuni 005 (EA).
- Senegalia brevispica* Harms Habit: Tree. Habitat: Dry bushland, thickets, 170–1830 m. Vouchers: SAJIT Z0058 (EA, HIB), Napier 2037 (EA).
- Vachellia hockii* De Wild. Habit: Tree. Habitat: Wooded grassland, 750–2250 m. Vouchers: FOKP 1266 (EA, HIB), Mbuni 654 (EA).
- Vachellia lahai* Benth. Habit: Tree. Habitat: Upland forest, dense woodland, 1500–2700 m. Vouchers: Mbuni 005 (EA), Napier 1952 & 2014 (EA), Padwa 56 (EA), Brown 577 (EA).
- Mimosa oerfota* (Forssk.) Schweinf. Habit: Tree. Habitat: Riverine woodland, 1500–2900 m. Voucher: Sooboda 58 (EA).
- Racosperma mearnsii* De Wild. Habit: Tree. Habitat: Wooded grassland, 900–2600 m. Vouchers: FOKP 11561 (EA, HIB), Mbuni 298 (EA).
- Mimosa mellifera* (M. Vahl) Benth. Habit: Tree. Habitat: Bushland grassland, Dry woodland, 1–1800 m. Vouchers: SAJIT Z0064 (EA, HIB), FOKP 1252 (EA, HIB).
- Mimosa nilotica* (L.) Delile Habit: Tree. Habitat: Woodland grassland, 1–2300 m. Vouchers: Mus 169 (EA), Bogdan 4340 (EA), Collias 15382 (EA).
- Vachellia tortilis* subsp. *spirocarpa* (A. Rich.) Brenan Habit: Tree. Habitat: Bushland along streams, 200–1650 m. Voucher: FOKP 1249 (EA, HIB).
- Vachellia reficiens* Wawra Habit: Tree. Habitat: Bushland, 50–1450 m. Voucher: FOKP 1257 (EA, HIB).

- Adenocarpus mannii* (Hook. f.) Hook. f.** Habit: Shrub. Habitat: Shrub Grassland, riverside, hearth, bamboo zone, 2400–3500 m. Voucher: SAJIT 007113 (EA, HIB).
- Albizia anthelmintica* Brongn.** Habit: Tree. Habitat: Dry bushland, 1–3550 m. Voucher: Kazuaki 52 (EA).
- Argyrolobium fischeri* Taub.** Habit: Herb. Habitat: Bushland, grassland, 1700–2700 m. Vouchers: SAJIT 005102 (EA, HIB), FOKP 1805 (EA, HIB).
- Argyrolobium ramosissimum* Baker.** Habit: Herb. Habitat: Forest margin, moorland, ericaceous, around 2300 m. Voucher: Rawlins 7 (EA).
- Astragalus atropilosulus* (Hochst.) Bunge.** Habit: Herb. Habitat: Open moorland, 1750–3550 m. Voucher: SAJIT 005084 (EA, HIB).
- Caesalpinia decapetala* (Roth) Alston** Habit: Shrub. Habitat: Bushland, Forest edges, 650–2050 m. Voucher: FOKP 1297 (EA, HIB).
- Cassia abbreviata* Oliv.** Habit: Shrub. Habitat: Bushland, 1–1000 m. Voucher: SAJIT 004734 (EA, HIB).
- Crotalaria anthyllopsis* Baker** Habit: Herb. Habitat: Wooded grassland, 1200–2250 m. Rocky places. Voucher: Tweedie 1921 (EA).
- Crotalaria axillaris* Aiton** Habit: Shrub. Habitat: Secondary bushland, woodland, grassland 1–2250 m. Vouchers: FOKP 1870, 11414 & 11613 (EA, HIB), Mbuni 150 (EA), Part II Botany 13 (EA).
- Crotalaria brevidens* Benth.** Habit: Shrub. Habitat: Grassland, bushland, 1500–3000 m. Vouchers: FOKP 11482 (EA), Mbuni 218 (EA), Napier 1979 (EA).
- Crotalaria chrysochlora* Harms** Habit: Herb. Habitat: Upland grassland, 1700–2900 m. Vouchers: Napier 1916 (EA), Webster 8786 (EA).
- Crotalaria deserticola* Baker f.** Habit: Shrub. Habitat: Open and wooded grassland, 100–2500 m. Vouchers: FOKP 11483 (EA, HIB), Mbuni 219 (EA).
- Crotalaria fascicularis* Polhill** Habit: Shrub. Habitat: Dry evergreen forest, 1300–2300 m. Voucher: Champion 1 (EA).
- Crotalaria incana* L.** Habit: Shrub. Habitat: Upland grassland, 600–1800 m. Vouchers: FOKP 11347 (EA, HIB), Mbuni 083 (EA).
- Crotalaria lachnocarpoides* Engl.** Habit: Shrub. Habitat: Bushed Grassland, forest thicket, forest margin, 1200–2650 m. Vouchers: FOKP 11573 (EA, HIB), Mbuni 310 (EA).
- Crotalaria microcarpa* Benth.** Habit: Herb. Habitat: Bushland, Grassland, 100–1700 m. Voucher: Tweedie 2040 (EA).
- Crotalaria natalitia* Meissner** Habit: Herb. Habitat: Forest edges, bushland and wooded or grassland, 1300–2500 m. Voucher: Symes 116 (EA).
- Crotalaria pallida* var. *obovata* (G. Don) Polhill.** Habit: Herb. Habitat: Bushland, near rivers and lakes, 450–1800 m. Voucher: Bogdan 4963 (EA).
- Crotalaria pallida* Aiton** Habit: Herb. Habitat: Bushland near rivers, 1100–1900 m. Voucher: Tweedie 2097 (EA).
- Crotalaria podocarpa* DC** Habit: Herb. Habitat: Open sandy place, wooded grassland, 1300–1650 m. Voucher: Bogdan 5173 (EA).

- Crotalaria stollzii* (Baker f.) Polhill Habit: Herb. Habitat: Upland grassland, forest margin, 1800–3000 m. Voucher: Thulin & Tidigs 163 (EA).
- Dalbergia lactea* Vatke Habit: Shrub. Habitat: Riverine, 1050–2400 m. Vouchers: SAJIT 006880 (EA, HIB), FOKP 1289 (EA, HIB), Tweedie 1084 (EA).
- Desmodium incanum* DC. Habit: Herb. Habitat: Forest margin, 1450–2800 m. Vouchers: FOKP 11527 (EA, HIB), Mbuni 263 (EA).
- Desmodium uncinatum* (Jacq.) DC. Habit: Shrub. Habitat: Forest shade, 1400–2800 m. Vouchers: (FOKP 11715 EA, HIB), Mbuni 715 (EA).
- Dinebra retroflexa* (Vahl) Panz. Habit: Herb. Habitat: Black clay soil, 500–2000 m. Voucher: Pratt 5716 (EA).
- Dolichos sericeus* subsp. *formosus* (A. Rich.) Verdc. Habit: Climber. Habitat: Evergreen montane forest edge, 1150–2750 m. Vouchers: SAJIT 00686 (EA, HIB), Tweedie 2959 (EA).
- Dolichos sericeus* E. Mey. Habit: Herb. Habitat: Montane forest edge, 1150–2750 m. Voucher: Irwin 369 (EA).
- Entada abyssinica* A. Rich. Habit: Tree. Habitat: Wooded grassland, Riverine forest, 1450–2150 m. Vouchers: SAJIT 004842 & 006851 (EA, HIB), FOKP 1277 (EA, HIB).
- Entada leptostachya* Harms. Habit: Climber. Habitat: Dry bushland, 100–1350 m. Voucher: SAJIT 004842 (EA, HIB).
- Eriosema buchananii* Baker f. Habit: Herb. Habitat: upland grassland, 1900–2300 m. Voucher: Napier 1971 (EA).
- Eriosema cordifolium* A. Rich. Habit: Herb. Habitat: Upland grassland about 2290 m. Voucher: Symes 526 (EA).
- Eriosema macrostipulum* Baker f. Habit: Herb. Habitat: Bushed grassland around 2100 m. Voucher: Symes 61 (EA).
- Eriosema montanum* Baker f. Habit: Herb. Habitat: Wooded grassland, 1500–3300 m. Voucher: Symes 203 (EA).
- Eriosema rhodesicum* R.E. Fr. Habit: Herb. Habitat: Burnt upland grassland, rocky hill side, 1620–2400 m. Voucher: Symes 277 (EA).
- Erythrina abyssinica* DC. Habit: Tree. Habitat: Open woodland, forest edge, 900–2250 m. Vouchers: FOKP 11488 (EA, HIB), Mbuni 224 (EA), Trapnell 2302 (EA).
- Faidherbia albida* (Delile) A. Chev. Habit: Tree. Habitat: Wooded grassland, 1500–2900 m. Voucher: Tweedie 2288 (EA).
- Galega lindblomii* (Harms) J.B. Gillett. Habit: Herb. Habitat: Mountain grassland, 2200–2800 m. Vouchers: SAJIT Z0071, FOKP 949 & 1143, Geesteranus 6320 (EA), Gillett 18423 (EA).
- Glycine wrightii* Lopez. Habit: Climber. Habitat: Disturbed ground, 2000–2900 m. Vouchers: FOKP 11450 (EA, HIB), Mbuni 186 (EA).
- Hylodesmum repandum* (Vahl) H. Ohashi & R.R. Mill Habit: Herb. Habitat: Forest shade, medium altitude forest, 1450–2800 m. Vouchers: FOKP 11525 (EA, HIB), Mbuni 261 (EA).
- Indigofera ambelacensis* Schweinf. Habit: Herb. Habitat: Grassland and bushland, 1000–2200 m. Vouchers: FOKP 11475 (EA, HIB), Mbuni 211 (EA).



- Indigofera arrecta* A. Rich.** Habit: Herb. Habitat: Grassland and bushland and forest edges, 300–2700 m. Vouchers: FOKP 11497 & 11714 (EA, HIB), Mbuni 233 & 714 (EA), Bogdan 5358 (EA).
- Indigofera astragalina* DC.** Habit: Herb. Habitat: Grazed grassland, 600–900 m. Vouchers: Bogdan 3410 (EA), Tweedie 2894 (EA).
- Indigofera bogdanii* J.B. Gillett** Habit: Shrub. Habitat: Dry grassland, 1500–2300 m. Voucher: Gillet 18423 (EA).
- Indigofera garckeana* Vatke** Habit: Herb. Habitat: Grassland and bushland, 1000–2500 m. Vouchers: Agnew et al. 10388 (EA), Irwin 144 (EA).
- Indigofera hochstetteri* Baker.** Habit: Herb. Habitat: Dry grassland, 200–2000 m. Voucher: Bogdan 3842 (EA).
- Indigofera schimperi* Jaub. & Spach.** Habit: Herb. Habitat: Grassland and bushland, 200–2200 m. Vouchers: FOKP 11747 (EA, HIB), Mbuni 747 (EA).
- Indigofera spicata* Forssk.** Habit: Herb. Habitat: Grassland, 0–2900 m. Vouchers: FOKP 11502 (EA, HIB), Mbuni 238 (EA).
- Indigofera trita* L. f.** Habit: Herb. Habitat: Grassland and bushland, 0–2500 m. Vouchers: SAJIT 004747 (EA, HIB), FOKP 1288 (EA, HIB).
- Lablab purpureus* (L.) Sweet.** Habit: Climber. Habitat: Riverine forest, 1–2400 m. Voucher: Webster 8788 (EA).
- Lonchocarpus eriocalyx* Harms** Habit: Tree. Habitat: Wooded grassland, 500–1680 m. Voucher: Bally 12334 (EA).
- Lotus becquetii* Boutique.** Habit: Herb. Habitat: Rocky hill side, 2000–2800 m. Voucher: Strange 185 (EA).
- Macrotyloma stipulosum* (Baker) Verdc.** Habit: Herb. Habitat: Wooded grassland, 1800–2150 m. Voucher: Symes 59 (EA).
- Neonotonia wightii* (Wight & Arn.) J.A. Lackey** Habit: Tree. Habitat: Bushland edges, 500–2100 m. Voucher: FOKP 1283 (EA, HIB).
- Neorautanenia mitis* (A. Rich.) Verdc.** Habit: Climber. Habitat: Dry bushland, 20–1800 m. Voucher: Padwa 291 (EA).
- Parochetus communis* D. Don.** Habit: Herb. Habitat: Moist area, 2200–3400 m. Voucher: FOKP 1908 & 1904 (EA, HIB).
- Pseudarthria confertiflora* (A. Rich.) Baker** Habit: Shrub. Habitat: Wooded grassland, 1–2200 m. Voucher: Webster 8793 (EA).
- Pterolobium stellatum* (Forssk.) Brenan** Habit: Shrub. Habitat: Bushland, Woodland, 1000–2250 m. Voucher: FOKP 1265 (EA, HIB).
- Rhynchosia hirta* (Andrews) Meikle & Verdc.** Habit: Liana. Habitat: Dry woodland and bushland, 1–1800 m. Voucher: SAJIT 006841 (EA, HIB).
- Rhynchosia orthobotrya* Harms.** Habit: Herb. Habitat: Dry rocky, bushland, 1000–2100 m. Voucher: Bogdan 3852 (EA).
- Rhynchosia resinosa* (A. Rich.) Baker.** Habit: Liana. Habitat: Wooded grassland, bushland, 1530–2500 m. Voucher: Tweedie 1914 (EA).
- Rhynchosia usambarensis* Taub.** Habit: Herb. Habitat: Upland grassland forest edge, 1650–2400 m. Voucher: FOKP 1284 (EA, HIB).

- Senna bicapsularis* (L.) **Roxb.** Habit: Shrub. Habitat: Wooded or bushed grassland, 1–1750 m. Voucher: Kuzuaki 9 (EA).
- Senna didymobotrya* (Fresen.) **H.S. Irwin & Barneby** Habit: Shrub. Habitat: Riverine, forest edge, 1500–2250 m. Vouchers: FOKP 11391 (EA, HIB), Mbuni 126 (EA).
- Senna hirsuta* (L.) **H.S. Irwin & Barneby**. Habit: Shrub. Habitat: Bushed grassland 100–1750 m. Vouchers: FOKP 11422 (EA), Mbuni 158 (EA).
- Senna obtusifolia* (L.) **H.S. Irwin & Barneby**. Habit: Shrub. Habitat: Riverine, 1000–1750 m. Voucher: Brodhurst hill 677 (EA).
- Senna occidentalis* (L.) **Link.** Habit: Shrub. Habitat: Cultivated ground, 250–1450 m. Vouchers: FOKP 11487 (EA), Mbuni 223 (EA), Ndegwa 974 (EA).
- Senna septemtrionalis* (Viv.) **H.S. Irwin & Barneby** Habit: Shrub. Habitat: Riverine, grassland, waste places, 1450–2200 m. Voucher: FOKP 1903 (EA, HIB).
- Sesbania sesban* (L.) **Merr.** Habit: Shrub. Habitat: Water logged areas below 1900 m. Vouchers: FOKP 11493 (EA, HIB), Mbuni 229 (EA).
- Tamarindus indica* **L.** Habit: Tree. Habitat: Riverine, bushland, 1–1500 m. Vouchers: Tweedie 65 (EA), Kazuaki 16 (EA).
- Tephrosia holstii* **Taub.** Habit: Herb. Habitat: Upland grassland, 1600–2600 m. Voucher: Symes 101 (EA).
- Tephrosia interrupta* **Engl.** Habit: Herb. Habitat: Scrub margin, 1400–3100 m. Vouchers: FOKP 11289 (EA), Mbuni 025 (EA), Thulin 120 (EA).
- Tephrosia vogelii* **Hook. f.** Habit: Herb. Habitat: Waste ground up to 2300 m. Voucher: Hepper 5058) (EA)
- Teramnus labialis* (L. f.) **Spreng.** Habit: Climber. Habitat: Wooded grassland, 1700–2500 m. Voucher: Boonman 6627 (EA).
- Vigna subterranea* (L.) **Verdc.** Habit: Herb. Habitat: Cultivated land below 1200 m. Voucher: FOKP 1716 (EA, HIB).
- Trifolium burchellianum* **Ser.** Habit: Herb. Habitat: Moist upland, 1600–3500 m. Vouchers: FOKP 951 (EA, HIB), Mabberley & McCall 242 (EA), Bogdan 4966 (EA).
- Trifolium cheranganiense* **J.B. Gillett** Habit: Herb. Habitat: Upland grassland, 2100–3100 m, Vouchers: Thorold 2759 (EA), Strange 48 (EA), Rawlins 2 (EA).
- Trifolium cryptopodium* **A. Rich.** Habit: Herb. Habitat: Grassland, 2100–3500 m. Vouchers: Thulin & Tidigs 113 (EA), Bogdan 4968 (EA).
- Trifolium polystachyum* **Fresen.** Habit: Herb. Habitat: Forest margin, Swamp grassland, 1600–2800 m. Vouchers: Irwin 308 (EA), Symes 637 (EA).
- Trifolium rueppellianum* **Fresen.** Habit: Herb. Habitat: Upland grassland and moorland, 1700–3500 m. Vouchers: FOKP 1128 (EA, HIB), Strange 140 (EA).
- Trifolium simense* **Fresen.** Habit: Herb. Habitat: Upland grassland, 2000–3500 m. Vouchers: Symes 638 (EA), Knight 56 (EA).
- Trifolium semipilosum* **Fresen.** Habit: Herb. Habitat: Upland grassland, 1500–3000 m. Vouchers: FOKP 11501 (EA), Mbuni 237 (EA).
- Trifolium usambarense* **Taub.** Habit: Herb. Habitat: Forest opening, 1500–2700 m. Voucher: SAJIT Z0074 (HIB).

***Vicia benghalensis* L.** Habit: Climber. Habitat: Upland grassland 2400–2800 m.  
Voucher: Irwin 205 (EA).

***Vigna monophylla* Taub.** Habit: Herb. Habitat: Wooded grassland, 1650–2500 m.  
Voucher: Symes 86 (EA).

***Vigna unguiculata* subsp. *dekindtiana* (Harms) Verdc.** Habit: Herb. Habitat: Bushland and forest edges, 1–2500 m. Voucher: Lyes 57 (EA).

***Vigna vexillata* (L.) A. Rich.** Habit: Herb. Habitat: Grassland, bushland and forest margins, 100–2500 m. Voucher: Symes 212 (EA).

***Zornia glochidiata* DC.** Habit: Herb. Habitat: Grassland, rocky areas, 0–1800 m.  
Voucher: Bogdan 3450 (EA).

#### F46. Polygalaceae

1 Genus 4 Species

***Polygala albida* Schinz** Habit: Herb. Habitat: Field of Weeds and roadside, 1400–2300 m. Voucher: Symes 758 (EA).

***Polygala arenaria* Willd.** Habit: Herb. Habitat: Disturbed ground, 60–1200 m.  
Voucher: Lucas 218 (EA).

***Polygala petitiana* A. Rich.** Habit: Herb. Habitat: Shallow soils on grassland, 100–2300 m. Voucher: Symes 158 (EA).

***Polygala spheoptera* Fresen.** Habit: Herb. Habitat: Upland grassland, disturbed soil on wet forest, 100–3200 m. Vouchers: SAJIT 005100 & Z0051 (EA, HIB), Mbuni 087 (EA), Carter & Stannard 48 (EA), Mabberley & McCall 279 (EA), Symes 217 (EA), Webster 8717 (EA).

#### F47. Rosaceae

5 Genera, 15 Species

***Alchemilla cryptantha* Steud. ex A. Rich.** Habit: Herb. Habitat: Montane grassland 2900–3500 m. Vouchers: Napier 1978 (EA), Knox 4185 & 4193 (EA).

***Alchemilla elgonensis* Mildbr.** Habit: Shrub. Habitat: Montane grassland, 3000–3500 m. Voucher: Thulin & Tidigs 248 (EA).

***Alchemilla ellenbeckii* Engl.** Habit: Shrub. Habitat: Highland grassland, 2100–3500 m. Voucher: Knox 3384 (EA).

***Alchemilla gracilipes* (Engl.) Engl.** Habit: Herb. Habitat: Montane grassland 2120–3500 m. Vouchers: SAJIT 006928 (EA, HIB), Dale 3400 (EA), Symes 619 (EA), Verdcourt 2426 (EA).

***Alchemilla johnstonii* Oliv.** Habit: Shrub. Habitat: Alpine forest, 3150–3350 m.  
Vouchers: Dale 340, Thulin & Tidigs 212 & 258 (EA), Knox 3385 (EA).

***Alchemilla lindblomiana* (Mildbr.) T.C.E. Fr.** Habit: Shrub. Habitat: 3000–3300 m.  
Voucher: Dale 3401(EA)



- Alchemilla rothii* Oliv.** Habit: Herb. Habitat: Bamboo zones, 2100–3500 m. Vouchers: Mabberley 579 (EA), Knox 3404 (EA).
- Cliffortia nitidula* (Engl.) R.E. Fr. & T.C.E. Fr.** Habit: Shrub. Habitat: Bamboo glades, moorland, 2920–3490 m. Voucher: Dale 3432 (EA).
- Hagenia abyssinica* (Bruce ex Steud.) J.F. Gmel.** Habit: Tree. Habitat: Woodland, 2300–3300 m. Voucher: SAJIT 004854 (EA, HIB).
- Prunus africana* (Hook. f.) Kalkman** Habit: Tree. Habitat: Woodland, Riverine, 1350–2750 m. Vouchers: SAJIT 006869 (EA, HIB), FOKP 1019, 10969 & 11609 (EA, HIB), Mbuni 609 (EA).
- Rubus apetalus* Poir.** Habit: Shrub. Habitat: Upland bushland, 1600–3000 m. Vouchers: FOKP 1060 & 11274 (EA, HIB).
- Rubus pinnatus* Willd.** Habit: Trailing Shrub. Habitat: Upland rain forest, bamboo 2400–3000 m. Voucher: Tweedie 4086 (EA).
- Rubus scheffleri* Engl.** Habit: Shrub. Habitat: Upland rain forest glades, 1800–2930 m. Vouchers: Mabberley 496 (EA), Lindsay 137 (EA).
- Rubus steudneri* Schweinf.** Habit: Shrub. Habitat: Montane forest, 2000–3480 m. Vouchers: SAJIT 003385, 005121 & 006811 (EA, HIB), FOKP 1010 & 10911 (EA, HIB), Beentje 3065 (EA), Tweedie 4086 (EA).
- Rubus volkensii* Engl.** Habit: Shrub. Habitat: Secondary bushland, bamboo zones, 2600–3500 m. Vouchers: SAJIT 004800 (EA, HIB), Thulin & Tidigs 242 (EA).

#### F48. Rhamnaceae

6 Genera, 8 Species

- Gouania longispicata* Engl.** Habit: Shrub. Habitat: Wooded grassland, 1450–2400 m. Vouchers: SAJIT 005057 (EA, HIB), FOKP 955, 1030, 2335 & 11278 (EA, HIB).
- Helinus integrifolius* (Lam.) Kuntze** Habit: Shrub. Habitat: Bushland, open woodland, 300–1330 m. Voucher: FOKP 1098 (EA, HIB).
- Helinus mystacinus* (Aiton) E. Mey. ex Steud.** Habit: Shrub. Habitat: 1000–1500 m. Voucher: FOKP 1098 (EA, HIB).
- Rhamnus prinoides* L'Hér.** Habit: Tree. Habitat: Bushland, Bamboo, heath zone, 1500–3150 m. Vouchers: SAJIT 004817 & 005080 (EA, HIB), FOKP 1001, 1226, 11310 & 11366, (EA, HIB), Mbuni 046 (EA).
- Rhamnus staddo* A. Rich.** Habit: Shrub. Habitat: Bushland, Grassland, 1500–2950 m. Vouchers: FOKP 11310 & 11652 (EA, HIB), Mbuni 046 & 652 (EA).
- Scutia myrtina* (Burm. f.) Kurz** Habit: Shrub. Habitat: Moist, dry forest, riverine up to 2750 m. Vouchers: SAJIT 005064 (EA, HIB), FOKP 943, 11266, 11309 & 11378 (EA, HIB), Mbuni 045 (EA).
- Ziziphus abyssinica* Hochst. ex A. Rich.** Habit: Tree. Habitat: Bushland, woodland, 700–2200 m. Voucher: FOKP 11318 (EA, HIB).
- Ziziphus mucronata* Willd.** Habit: Tree. Habitat: Bushland, Wooded Grassland, 1–1950 m. Voucher: FOKP 11334 (EA, HIB).

**F49. Ulmaceae**

1 Genus, 1 Species

***Chaetachme aristata* Planch.** Habit: Tree. Habitat: Bushland, 1050–2100 m. Voucher: FORK 927 (EA, HIB).

**F50. Cannabaceae**

2 Genera, 2 Species

***Celtis africana* Burm. f.** Habit: Tree. Habitat: Riverine forest, 1150–2400 m. Voucher: Verdcourt 11725 (EA).

***Trema orientalis* (L.) Blume** Habit: Tree. Habitat: Wooded grassland, forest edges, 1–1800 m. Vouchers: FOKP 11562 (EA), Mbuni 299 (EA).

**F51. Moraceae**

2 Genera, 8 Species

***Ficus glumosa* Delile** Habit: Tree. Habitat: Rocky hillsides, 450–2050 m. Vouchers: SAJIT 006836 (EA, HIB), FOKP 10936 (EA, HIB).

***Ficus sur* Forssk.** Habit: Tree. Habitat: Riverine, Bushland, 1–2100 m. Vouchers: SAJIT 006849 (EA, HIB), FOKP 1273 & 10949 (EA, HIB).

***Ficus exasperata* Vahl** Habit: Tree. Habitat: Wet forest up to 1850 m. Voucher: FOKP 920 (EA, HIB).

***Ficus natalensis* Hochst.** Habit: Tree. Habitat: Riverine, 900–1800 m. Voucher: FOKP 1032 (EA, HIB).

***Ficus thonningii* Blume** Habit: Tree. Habitat: Wooded grassland, 1050–2400 m. Vouchers: SAJIT 005149 (EA, HIB).

***Dorstenia afromontana* R.E. Fr.** Habit: Herb. Habitat: Wet montane forest, 2000–2600 m. Voucher: FOKP 1814 (EA, HIB).

***Dorstenia hildebrandtii* var. *schlechteri* (Engl.) Hijman** Habit: Herb. Habitat: Riverine forest, 275–2100 m. Vouchers: FOKP 11671 (EA, HIB), Mbuni 671 (EA), Napier 1915 (EA).

***Dorstenia barnimiana* var. *tropaeolifolia* (Schweinf.) Rendle** Habit: Herb. Habitat: Open savannah, common everywhere in short grass, Stony upland, 1000–2100 m. Voucher: Symes 627 (EA).

**F52. Urticaceae**

8 Genera, 13 Species

***Droguetia debilis* Rendle** Habit: Herb. Habitat: Highland forest, 275–2100 m. Voucher: FOKP 1875 (EA, HIB).

***Droguetia iners* (Forssk.) Schweinf.** Habit: Herb. Habitat: Lower edge bamboo, 1600–3250m. Vouchers: SAJIT 004828 & 006920 (EA, HIB), FOKP 11020 (EA, HIB).

- Elatostema monticola* Hook. f.** Habit: Herb. Habitat: Wet places, 1600–2800 m. Vouchers: SAJIT 006890 (EA, HIB), FOKP1735 & 10990 (EA, HIB).
- Laportea alatipes* Hook. f.** Habit: Herb. Habitat: Disturbed ground in wet montane forest, 1560–3000 m. Habitat: Wet mountain forest, 1560–3010 m. Voucher: FOKP 1080 (EA, HIB).
- Laportea ovalifolia* (Schumach. & Thonn.) Chew.** Habit: Herb. Habitat: Disturbed woodland, 900–2910 m. Voucher: SAJIT 007125 (EA, HIB).
- Parietaria debilis* G. Forst.** Habit: Herb. Habitat: Montane forest, 1560–3010 m. Voucher: Tweedie 2698 (EA).
- Pilea angolensis* (Hiern) Rendle** Habit: Herb. Habitat: streamsides, 1400–2800 m. Voucher: SAJIT 005090 (EA, HIB).
- Pilea johnstonii* Oliv.** Habit: Herb. Habitat: streamsides 1680–2910 m. Voucher: Part II Botany 52 (EA).
- Pilea rivularis* Wedd.** Habit: Herb. Habitat: Montane forest, Streams & Paths, 1480–3100 m. Voucher: SAJIT 004827 (EA, HIB).
- Pilea tetraphylla* (Steud.) Blume** Habit: Herb. Habitat: Montane forest, 1750–2480 m. Voucher: Gilbert & Meifin 6467 (EA).
- Urera hypselodendron* (Hochst. ex A. Rich.) Wedd.** Habit: Climber. Habitat: Montane forest, moist upland forest, 1480–3100 m. Vouchers: SAJIT 004822, 005082 & 006866 (EA, HIB), FOKP 952, 964, 11358, 11377 & 11617 (EA, HIB), Mbuni 114 & 617 (EA).
- Urtica massaica* Mildbr.** Habit: Herb. Habitat: Montane forest, 2000–3400 m. Vouchers: FOKP 961, 11312 & 11326 (EA, HIB), Mbuni 062 (EA).
- Pouzolzia parasitica* (Forssk.) Schweinf.** Habit: Herb. Habitat: Upland forest 1050–2100 m. Voucher: FOKP 1880 (EA, HIB).

### F53. Cucurbitaceae

6 Genera, 8 Species

- Coccinia adoensis* (Hochst. ex A. Rich.) Cogn.** Habit: Climber. Habitat: Highland grassland, 1600–2300 m. Vouchers: Napier 1899 (EA), Symes 283 (EA).
- Coccinia grandis* (L.) Voigt** Habit: Climber. Habitat: Riverine, 250–1650 m. Vouchers: SAJIT 006918 (EA, HIB), FOKP 11018 (EA, HIB).
- Cucumis ficifolius* A. Rich.** Habit: Climber. Habitat: Highland grassland, 1000–1650 m. Voucher: Symes 273 (EA).
- Momordica foetida* Schumach.** Habit: Climber. Habitat: Grassland, Woodland 150–1650 m. Vouchers: SAJIT 004743 & 006882 (EA, HIB), FOKP 11293 (EA, HIB), Mbuni 656 & 716 (EA).
- Peponium vogelii* (Hook. f.) Engl.** Habit: Climber. Habitat: Forest edge, 10–2600 m. Vouchers: SAJIT 006870 (EA, HIB), FOKP 1256, 1269 & 11428 (EA, HIB), Mbuni 164 (EA), Brodhust hill 537 (EA), Napier 1975 (EA).
- Trochomeria macrocarpa* subsp. *vitifolia* R. Fern. & A. Fern.** Habit: Climber. Habitat: Grassland, 1000–2500 m. Voucher: Lindsay 130 (EA).



***Zehneria anomala* C. Jeffrey** Habit: Climber. Habitat: 1000–2500 m. Vouchers: FOKP 11328 (EA, HIB), Mbuni 064 (EA).

***Zehneria scabra* Sond.** Habit: Climber. Habitat: Bushland, Forest edges, 1000–3300 m. Vouchers: SAJIT 004721, 006799 & 006872 (EA, HIB), FORK 933, 1005, 10899 & 11462 (EA, HIB), Mbuni 064 & 198 (EA).

#### F54. Bignoniaceae

1 Genus, 1 Species

***Stereospermum kunthianum* Cham.** Habit: Tree. Habitat: Rocky bushland, wooded grassland, 900–2100 m. Habitat: Voucher: Bogdan 265 (EA).

#### F55. Celastraceae

6 Genera, 11 Species

***Catha edulis* (Vahl) Endl.** Habit: Tree. Habitat: Wooded grassland, 1200–2400 m. Vouchers: Munro 989 (EA), Agnew 5087 (EA).

***Cassine aethiopica* Thunb.** Habit: Shrub. Habitat: Bushland, 900–2400 m. Vouchers: FOKP 11608 (EA, HIB), Mbuni 608 (EA).

***Gymnosporia buchananii* Loes.** Habit: Shrub. Habitat: Grassland, 1–2650 m. Vouchers: FOKP 11294 (EA, HIB), Birch 61 & 180 (EA).

***Gymnosporia heterophylla* (Eckl. & Zeyh.) Loes.** Habit: Shrub. Habitat: Dry Upland & lowland Forest, Riverine, wooded grassland, 1150–2700 m. Vouchers: FOKP 11601 (EA, HIB), Mbuni 144 & 601 (EA, HIB).

***Gymnosporia keniensis* (Loes.) Jordaan** Habit: Shrub Habitat: Dry Upland & lowland Forest, Riverine, thickets, Woodland, 1350–2250 m. Vouchers: SAJIT 004826 (EA, HIB), Fries & Hansen 2549 (EA).

***Gymnosporia senegalensis* (Lam.) Loes.** Habit: Tree. Habitat: Bushed grassland, Riverine, 1–2100m. Vouchers: FOKP 11376 (EA), Buich 61 & 180 (EA), Lind et al. 5082 (EA), Webster 8812 (EA).

***Hippocratea goetzei* Loes.** Habit: Shrub. Habitat: Woodland, forest thicket, 1100–2700 m. Voucher: FOKP 1806 (EA, HIB).

***Maytenus arbutifolia* (Hochst. ex A. Rich.) R. Wilczek** Habit: Tree. Habitat: Bushland, Grassland, 1600–2350 m. Vouchers: SAJIT 004757 (EA, HIB), FOKP 1271 (EA, HIB).

***Maytenus obscura* (A. Rich.) Cufod.** Habit: Shrub. Habitat: Bushland, 1900–2550 m. Vouchers: FOKP 1089, 1235 (EA, HIB).

***Maytenus undata* (Thunb.) Blakelock** Habit: Tree. Habitat: Evergreen forest, dry Bushland, Grassland, 1500–3200 m. Vouchers: SAJIT 004755 (EA, HIB), FOKP 1015 (EA, HIB).

***Simirestis brianii* N. Hallé** Habit: Tree. Habitat: Forest margin, 500–2550 m. Voucher: SAJIT Z0110 (HIB).

**F56. Oxalidaceae**

1 Genus, 4 Species

***Oxalis anthelmintica* A. Rich.** Habit: Herb. Habitat: Grassland, Riverine 840–2400 m. Voucher: Symes 58 (EA).

***Oxalis corniculata* L.** Habit: Herb. Habitat: Grassland, Disturbed ground, 0–3500 m. Voucher: Townsend 2374 (EA).

***Oxalis obliquifolia* Steud. ex A. Rich.** Habit: Herb. Habitat: Grazer pasture, Grassland, roadsides, 830–3300 m. Voucher: Thulin 81 (EA).

***Oxalis radicata* A. Rich.** Habit: Herb. Habitat: Weed of cultivation and disturbed ground, 830–2500 m. Voucher: Symes 46 (EA).

**F57. Rhizophoraceae**

1 Genus, 3 Species

***Cassipourea malosana* (Baker) Alston** Habit: Tree. Habitat: Bushland, Understorey in moist forest, 750–2900 m. Voucher: SAJIT 004730 (EA, HIB).

***Cassipourea rotundifolia* (Engl.) Alston.** Habit: Tree. Habitat: Woodland, 900–1700 m. Voucher: SAJIT 007077 (EA, HIB).

***Cassipourea ruwensorensis* (Engl.) Alston** Habit: Tree. Habitat: Evergreen forest, woodland, 1450–1600 m, Voucher: FOKP 1125 (EA, HIB).

**F58. Peraceae**

1 Genus, 1 Species

***Clusia abyssinica* Jaub. & Spach** Habit: Shrub; Habitat: Secondary bushland, 1600–3100 m. Vouchers: SAJIT 007042 (EA, HIB), FOKP 1035 & 11283 (EA, HIB), Mbuni 019 (EA).

**F59. Euphorbiaceae**

13 Genera, 30 Species

***Acalypha fruticosa* Forsk.** Habit: Shrub. Habitat: Lowland forest edge, 200–2000 m. Vouchers: FOKP 11676 (EA, HIB), Mbuni 676 (EA).

***Acalypha volkensii* Pax** Habit: Shrub. Habitat: Upland grassland, 800–2700 m. Vouchers: SAJIT 004732 & 006867 (EA, HIB), FOKP 11407 (EA, HIB), Mbuni 143 & 712 & (EA).

***Acalypha polymorpha* Müll. Arg.** Habit: Herb. Habitat: Wooded, grassland, 1700–2300 m. Voucher: Symes 34 (EA).

***Croton dichogamus* Pax** Habit: Tree. Habitat: Dry bushland, Disturbed sites, 500–2100 m. Vouchers: FOKP 11466 & 11658 (EA, HIB), Mbuni 202 & 658 (EA).

- Croton macrostachyus* Hochst. ex Delile** Habit: Tree. Habitat: Wooded Grassland, dry or moist upland forest, 1350–2250 m. Vouchers: FOKP 1150 & 11697 (EA, HIB), Mbuni 236 & 697 (EA), Birch 61 & 169 (EA).
- Cordia monoica* Roxb.** Habit: Shrub. Habitat: Deciduous bushland, grassland, 1–2100 m. Vouchers: SAJIT Z006 (HIB).
- Erythrococca bongensis* Pax** Habit: Tree. Habitat: Wooded Bushland, River line or thicket, 900–2100 m. Vouchers: FOKP 11430 (EA, HIB), Mbuni 166 (EA).
- Erythrococca fischeri* Pax** Habit: Shrub. Habitat: Woodland, grassland, 1500–2300 m. Vouchers: FOKP 1028 & 1234 (EA, HIB).
- Euphorbia abyssinica* J.F. Gmel.** Habit: Tree. Habitat: Woodland, 2100–2400 m. Vouchers: SAJIT 006883 (EA, HIB), Haper & Field 4975 (EA), Mabberley 497 (EA).
- Euphorbia ampliphylla* Pax** Habit: Tree. Habitat: Woodland, grassland, 1500–2300 m. Voucher: Mabberley 497 (EA).
- Euphorbia bongensis* Kotschy & Peyr. ex Boiss.** Habit: Shrub. Habitat: Rare in grassland, 1200–2000 m. Voucher: Napper & Tweedie 2115 (EA).
- Euphorbia brevicornu* Pax** Habit: Herb. Habitat: Drier highlands, 2200–3600 m. Voucher: Mabberley & McCall 254 (EA).
- Euphorbia cyparissioides* Pax** Habit: Herb. Habitat: Grassland, 1900–2250 m. Voucher: Webster 8773 (EA).
- Euphorbia depauperata* Hochst. ex A. Rich.** Habit: Shrub. Habitat: Highland grassland, 1900–3200 m. Voucher: Thulin & Tidigs 224 (EA).
- Euphorbia engleri* Pax** Habit: Herb. Habitat: Shade of montane forest, 1500–2800 m. Voucher: FOKP 1807 (EA, HIB).
- Euphorbia heterospina* S. Carter** Habit: Shrub. Habitat: Woodland, 900–1800 m. Voucher: FOKP 1247 (EA, HIB).
- Euphorbia repetita* Hochst. ex A. Rich.** Habit: Herb. Habitat: Grassland, 2300–2700 m. Vouchers: Thulin & Tidigs 142 (EA), Agnew et al. 10530 (EA).
- Euphorbia scarlatina* S. Carter** Habit: Shrub. Habitat: Bushland on rocky slopes, 600–2000 m. Voucher: SAJIT 006875 (EA, HIB).
- Euphorbia schimperiana* Scheele** Habit: Herb. Habitat: Grassland, montane 1600–3500 m. Vouchers: SAJIT 005113 (EA, HIB), Thulin & Tidigs 142 (EA).
- Euphorbia tirucalli* L.** Habit: Shrub. Habitat: Dry bushland, 0–1600 m. Voucher: Tweedie 2101 (EA).
- Euphorbia umbellata* (Pax) Bruyns** Habit: Tree. Habitat: Dry forest, riverine, 1150–2100 m. Voucher: Glover et al. 1969 (EA).
- Macaranga capensis* (Baill.) Sim** Habit: Tree Habitat: Moist forest, 300–2100 m. Voucher: SAJIT 004824 (EA, HIB).
- Macaranga kilimandscharica* Pax** Habit: Tree. Habitat: Moist upland forest, 1650–2400 m. Vouchers: SAJIT 006797 (EA, HIB), FORK 991, 1000, 10896 & 11349 (EA, HIB), Birch 175 (EA), Buch 61 & 175 (EA).
- Margaritaria discoidea* var. *fagifolia* (Pax) Radcl.–Sm.** Habit: Herb. Habitat: Upland forest, 10–1700 m. Voucher: Obunyali & Omondi 0226 (EA).



***Micrococca mercurialis* (L.) Benth.** Habit: Herb. Habitat: Dry bushland, 10–1610 m.  
Voucher: Bogdan 3847 (EA).

***Mondia whitei* (Hook. f.) Skeels.** Habit: Shrub. Habitat: Forest thickets, 800–2200 m. Voucher: FOKP 1718 (EA, HIB).

***Neoboutonia macrocalyx* Pax** Habit: Tree. Habitat: Upland forest, evergreen forest, Riverbanks 1600–2700 m. Vouchers: SAJIT 005087 & 006798 (EA, HIB), FOKP 11351 & 11523 (EA, HIB), Mbuni 259 (EA), Tweedie 4118 (EA).

***Ricinus communis* L.** Habit: Herb. Habitat: Bushland, Grassland, 600–3100 m.  
Voucher: Mas 236 (EA).

***Shirakiopsis elliptica* (Hochst.) Esser** Habit: Tree. Habitat: Woodland, 1400–1800 m. Voucher: Birch 177 (EA).

***Tragia brevipes* Pax** Habit: Herb. Habitat: Dry forest, 600–2600 m. Vouchers: SAJIT 004744 (EA, HIB), FOKP 1059 & 11753 (EA, HIB), Mbuni 753 (EA).

## F60. Ochnaceae

1 Genus, 2 Species

***Ochna inermis* (Forssk.) Schweinf. ex Penz.** Habit: Shrub. Habitat: Bushland, 1–1450 m. Voucher: Carter & Stannard 70 (EA).

***Ochna thomasiana* Engl. & Gilg** Habit: Tree. Habitat: Bushland, woodland, 1500–2400 m. Vouchers: FOKP 11628 (EA), Mbuni 628 (EA).

## F61. Phyllanthaceae

2 Genera, 7 Species

***Bridelia scleroneura* Müll. Arg.** Habit: Shrub. Habitat: Wooded grassland, 900–1650 m. Voucher: Pole & Erens 1519 (EA).

***Phyllanthus fischeri* Pax** Habit: Shrub. Habitat: Woodland, Forest edge, river line bushes, 1450–2700 m. Vouchers: SAJIT 004778 (EA, HIB), FOKP 11370 (EA, HIB), Mbuni 106 (EA), Thulin & Tidigs 122 (EA), Agnew et al. 10493 (EA), Hepper 4980 (EA).

***Phyllanthus ovalifolius* Forssk.** Habit: Shrub. Habitat: Bushland, 1350–2450 m. Vouchers: FOKP 11459 & 11679 (EA, HIB), Mbuni 195 & 679 (EA).

***Phyllanthus sepialis* Müll. Arg.** Habit: Shrub. Habitat: Riverine Woodland, Bushland, 600–1950 m. Voucher: FOKP 11384 (EA, HIB).

***Phyllanthus suffrutescens* Pax** Habit: Herb. Habitat: Grassland 1200–2350 m. Voucher: Napier 1911 (EA).

***Phyllanthus niruroides* Müll. Arg.** Habit: Herb. Habitat: Grassland, 1200–2350 m. Voucher: Agnew et al. 10318 (EA).

***Phyllanthus boehmii* Pax** Habit: Herb. Habitat: Grassland moorland, 2000–3270 m. Voucher: FOKP 960 (EA, HIB).

**F62. Passifloraceae**

1 Genus, 1 Species

***Adenia cissampeloides* (Planch. ex Hook.) Harms** Habit: Climber. Habitat: Moist forest, 0–2500 m. Voucher: SAJIT 004724 (EA, HIB).

**F63. Salicaceae**

4 Genera, 5 Species

***Casearia battiscombei* R.E. Fr.** Habit: Tree. Habitat: Upland moist forest, 1350–2400 m. Vouchers: SAJIT 006907 (EA, HIB), FOKP 1122 & 11007 (EA, HIB), Mbuni 588 & 618 (EA).

***Dovyalis abyssinica* (A. Rich.) Warb.** Habit: Tree. Habitat: Upland moist forest, 1450–2600 m. Vouchers: FOKP 11365 (EA), Mbuni 101 (EA).

***Dovyalis macrocalyx* (Oliv.) Warb.** Habit: Shrub. Habitat: Moist forest, grassland 120–2400 m. Vouchers: FOKP 11678 (EA), Mbuni 678 (EA).

***Flacourtia indica* (Burm. f.) Merr.** Habit: Tree. Habitat: Wooded grassland, 1200–2400 m. Vouchers: FOKP 1264, 11288 & 11321 (EA, HIB), Mbuni 741 (EA), Brunt 1410 (EA), Kazuaki 15 (EA), Buch 164 (EA).

***Trimeria grandifolia* (Hochst.)** Habit: Tree. Habitat: Bushland 150–2500 m. Vouchers: FOKP 11672 (EA), Mbuni 672 (EA), Beentje 3044 (EA).

**F64. Violaceae**

1 Genus, 3 Species

***Viola eminii* (Engl.) R.E. Fr.** Habit: Herb. Habitat: Forest paths & streamside, 2100–3540 m. Voucher: Mabberley & McCall 240 (EA).

***Viola abyssinica* Steud. ex Oliv.** Habit: Herb. Habitat: Alpine, along paths, 1600–3500 m. Voucher: Townsend 2383 (EA).

***Viola villosa* Walter** Habit: Climber. Habitat: Forest paths & streamside, 2100–3540 m. Voucher: Irwin 205 (EA).

**F65. Linaceae**

1 Genus, 1 Species

***Linum volkensii* Engl.** Habit: Herb. Habitat: Upland grassland, Roadsides & waste places, 1100–2900 m. Voucher: Agnew et al. 10504 (EA).

**F66. Hypericaceae**

1 Genus, 6 Species

***Hypericum kiboense* Oliv.** Habit: Shrub. Habitat: Bamboo zone, 2250–3250 m. Voucher: Mabberley 582 (EA).

***Hypericum lalandii* Choisy.** Habit: Herb. Habitat: Grassland, 1500–2300 m. Voucher: Symes 615 (EA).

***Hypericum peplidifolium* A. Rich.** Habit: Herb. Habitat: Subalpine grassland, 1350–3500 m. Voucher: Napier 1927 (EA), Mabberley 7 (EA), McCall 192 (EA), Symes 45 (EA).

***Hypericum quartinianum* A. Rich.** Habit: Shrub. Habitat: Rocky stream-banks, 1500–2250 m. Voucher: FOKP 11268 (EA, HIB).

***Hypericum revolutum* Vahl** Habit: Shrub. Habitat: Heath zone, 2700–3500 m. Vouchers: SAJIT 004812 (EA, HIB), FOKP 992, 1087 & 11773 (EA, HIB), Mbuni 001 (EA), Knox 4174 (EA), Kokwaro 2532 (EA).

***Hypericum scioanum* Chiov.** Habit: Herb. Habitat: Montane forest, 1850–3500 m. Vouchers: SAJIT 005120 (EA, HIB), Knox 3451 & 3364 (EA).

### F67. Geraniaceae

2 Genera, 4 Species

***Geranium vagans* Baker** Habit: Herb. Habitat: Grassland in montane, 2640–3500 m. Voucher: Beentje 3072 (EA).

***Geranium aculeolatum* Oliv.** Habit: Herb. Habitat: Montane forest 2640–3500 m. Vouchers: SAJIT 005030 (EA, HIB), Mabberley 255 (EA).

***Geranium arabicum* Forssk.** Habit: Herb. Habitat: Montane forest, 1800–3550 m. Voucher: FOKP 1300, Napier 1972 (EA).

***Pelargonium alchemilloides* (L.) Aiton** Habit: Herb. Habitat: Wooded grassland montane forest edge, 1000–2100 m. Voucher: FOKP 1825 (EA).

### F68. Melianthaceae

1 Genus, 1 Species

***Bersama abyssinica* Fresen.** Habit: Tree. Habitat: Dry & wet montane forest, 1150–2550 m. Vouchers: SAJIT 004818, 005071 & 007049 (EA, HIB), FOKP 941, 1263, 11284 & 11410 (EA, HIB), Mbuni 146 & 708 (EA).

### F69. Combretaceae

2 Genera, 6 Species

***Combretum apiculatum* Sond.** Habit: Tree. Habitat: Wooded grassland, 250–1750 m. Voucher: SAJIT 004849 (EA).

***Combretum collinum* subsp. *binderianum* (Kotschy) Okafa** Habit: Tree. Habitat: Wooded grassland, 700–2200 m. Voucher: Lucas 156 (EA).

***Combretum capituliflorum* Fenzl ex Schweinf.** Habit: Liana. Habitat: Wooded grassland, Riverine forest, 900–1100 m. Voucher: Wilson 310 (EA).

***Combretum molle* R. Br. ex G. Don** Habit: Tree. Habitat: Wooded grassland, 150–2100 m. Vouchers: FOKP 1102, 11270 & 11682 (EA, HIB).



***Terminalia boivinii* Tul.** Habit: Tree. Habitat: Woodland, 700–1900 m. Voucher: SAJIT Z0055 (EA, HIB).

***Terminalia brownii* Fresen.** Habit: Tree. Habitat: Bushland, Woodland 700–1900 m. Voucher: FOKP 11342 (EA, HIB).

#### F70. Lythraceae

2 Genera, 2 Species

***Rotala tenella* (Guill. & Perr.) Hiern** Habit: Herb. Habitat: Grassland, 1250–2100 m. Vouchers: SAJIT 006913 (EA, HIB), FOKP 11013 (EA, HIB).

***Woodfordia uniflora* (A. Rich.) Koehne** Habit: Shrub. Habitat: Bushland, Rocky slopes, along dry rivers, 1350–2300 m. Voucher: Gardner 3717 (EA).

#### F71. Onagraceae

2 Genera, 4 Species

***Epilobium hirsutum* L.** Habit: Herb. Habitat: Swamps, upland grassland, 1800–2450 m. Vouchers: FOKP 11332 & 11720 (EA, HIB), Mbuni 068, 720 (EA).

***Epilobium salignum* Hausskn.** Habit: Herb. Habitat: Swampy places, 1800–3550 m. Voucher: Brodhurst 505 (EA).

***Epilobium stereophyllum* Fresen.** Habit: Herb. Habitat: Upland grassland, 2600–3500 m. Vouchers: Symes 626 (EA), Thulin et al. 106 (EA), Muthama et al. 170 (EA).

***Ludwigia abyssinica* A. Rich.** Habit: Herb. Habitat: Swampy places, 1000–2300 m. Vouchers: FOKP 974 (EA, HIB), Symes 517 (EA).

#### F72. Myrtaceae

2 Genera, 3 Species

***Psidium guajava* L.** Habit: Tree. Habitat: Bushland, 1000–2500 m. Vouchers: Mbuni 207 (EA), FOKP 11471 (EA).

***Syzygium guineense* (Willd.) DC.** Habit: Tree. Habitat: Wooded grassland, Riverine, 1–2500 m. Vouchers: SAJIT 005086 (EA, HIB), FOKP 11612 (EA), Mbuni 612 (EA), Thomas 2110 (EA), Dale 902 (EA).

***Syzygium cordatum* Hochst. ex Krauss** Habit: Tree. Habitat: Riverine, 1–2500 m. Vouchers: FOKP 11272, 11443 & 11669 (EA, HIB), Mbuni 179 & 669 (EA).

#### F73. Melastomataceae

2 Genera, 6 Species

***Antherotoma naudinii* Hook. f.** Habit: Herb. Habitat: Shallow soils, watercourses, 500–2300 m. Voucher: Bogdan 5280 (EA).

***Dissotis debilis* Triana** Habit: Herb. Habitat: Swampy grassland, 10–1800 m. Voucher: FOKP 1242 (EA, HIB).

***Dissotis speciosa* Taub.** Habit: Shrub. Habitat: Swampy areas, 1000–2250 m. Vouchers: Verdcourt 734 (EA), Webster 8749, Gardner 3718 (EA).

***Dissotis canescens* (E. Mey. ex Graham) Hook. f.** Habit: Herb. Habitat: Swampy grassland, 800–2200 m. Vouchers: Webster 748 & 8747 (EA).

***Dissotis senegambiensis* (Guill. & Perr.) Triana** Habit: Herb. Habitat: Grassland, 1350–2650 m. Voucher: Webster 8746 (EA).

***Dissotis irvingiana* Hook.** Habit: Herb. Habitat: Swampy grassland, 800–2200 m. Voucher: Webster 8745 (EA).

#### F74. Penaeaceae

1 Genera, 1 Species

***Olinia rochetiana* A. Juss.** Habit: Tree. Habitat: Dry upland forest, 1700–3050 m. Vouchers: FOKP 1024 & 1216 (EA, HIB), Mbuni 007 & 745 (EA), Rauh 577 (EA), Part II Botany 47 (EA).

#### F75. Burseraceae

1 Genus, 3 Species

***Commiphora eminii* Engl.** Habit: Tree. Habitat: Dry evergreen forest, 600–1000 m. Voucher: SAJIT Z0062 (EA, HIB).

***Commiphora habessinica* (O. Berg) Engl.** Habit: Shrub. Habitat: Bushed grassland, 500–1900 m. Voucher: Tanaka 234 (EA).

***Commiphora holtziana* Engl.** Habit: Tree. Habitat: Bushland, 20–1100 m. Voucher: FOKP 11341 (EA, HIB).

#### F76. Anacardiaceae

4 Genera, 10 Species

***Lannea fulva* (Engl.) Engl.** Habit: Shrub. Habitat: Bushland, Wooded grassland, 950–1900 m. Voucher: FOKP 11335 (EA, HIB).

***Lannea schimperi* (Hochst. ex A. Rich.) Engl.** Habit: Tree. Habitat: Wooded grassland, 1300–1900 m. Voucher: FOKP1818 (EA, HIB).

***Lannea triphylla* (Hochst. ex A. Rich.) Engl.** Habit: Shrub. Habitat: Wooded grassland, 50–1650 m. Vouchers: FOKP 11674 (EA), Mbuni 674 (EA).

***Ozoroa insignis* Delile** Habit: Tree. Habitat: Wooded grassland, 1–2500 m. Vouchers: SAJIT 004740 (EA, HIB), FOKP 11746 (EA, HIB), Mbuni 746 (EA), Kefri 24 (EA).

***Ozoroa insignis* subsp. *reticulata* (Baker f.) J.B. Gillett** Habit: Tree. Habitat: Wooded grassland, 1500–2500 m. Voucher: Rindsay 169 (EA).

***Rhus longipes* Engl.** Habit: Tree. Habitat: Wooded grassland, 1000–2400 m. Vouchers: SAJIT 006808 (EA, HIB), FOKP 10908 & 11308 (EA, HIB).

***Searsia natalensis* (Bernh. ex C. Krauss) F.A. Barkley** Habit: Shrub. Habitat: Dry forest wooded grassland, forest margin, forest thicket, 1050–2700 m. Vouchers: FOKP 1096, 11436 & 11290 (EA, HIB), Mbuni 172 (EA).

***Searsia pyroides* (Burch.) Moffett** Habit: Tree. Habitat: Wooded grassland; 1200–2700 m. Vouchers: FOKP 11352 & 11650 (EA, HIB), Mbuni 088 & 650 (EA).

***Searsia tenuinervis* (Engl.) Moffett** Habit: Shrub. Habitat: Wooded grassland, 850–1500 m. Vouchers: FOKP 11740 (EA, HIB), Mbuni 740 (EA).

***Searsia ruspolii* (Engl.) Moffett** Habit: Shrub. Habitat: Evergreen bushland, 1500–2400 m. Vouchers: SAJIT 006871 (EA, HIB), FOKP 1021, 11324 & 11575 (EA, HIB), Mbuni 312 (EA), Kokwaro 2537 (EA).

## F77. Sapindaceae

8 Genera, 9 Species

***Allophylus abyssinicus* (Hochst.) Radlk.** Habit: Tree. Habitat: Moist forest, river line, 1000–2550 m. Vouchers: SAJIT 006927 (EA, HIB), FOKP 1130, 11359 & 11542 (EA, HIB), Mbuni 279 (EA).

***Cardiospermum grandiflorum* Sw.** Habit: Climber. Habitat: Upland forest edges, 750–1800 m. Vouchers: Bogdan 3834 (EA), Mabberley & McCall 99 (EA).

***Deinbollia borbonica* Scheff.** Habit: Tree. Habitat: Secondary bushland, 1200–2550 m. Vouchers: FOKP 1068 (EA, HIB).

***Dodonaea viscosa* (L.) Jacq.** Habit: Shrub. Habitat: Secondary bushland, 1000–2700 m. Vouchers: SAJIT 004844 (EA, HIB), FOKP 11295 (EA, HIB).

***Dodonaea viscosa* subsp. *angustifolia* (L. f.) J.G. West** Habit: Shrub. Habitat: Secondary bushland, 1000–2700 m. Vouchers: FOKP 1278 & 11686 (EA, HIB), Mbuni 686 (EA).

***Haplocoelum foliolosum* (Hiern) Bullock** Habit: Tree. Habitat: Secondary bushland, 900–1800 m. Voucher: SAJIT Z0048 (HIB).

***Lecaniodiscus fraxinifolius* subsp. *vaughanii* (Dunkley) Friis** Habit: Tree. Habitat: Woodland, 1–1200 m. Voucher: Dale 1093 (EA).

***Lepisanthes senegalensis* (Poir.) Leenh.** Habit: Tree. Habitat: Woodland, riverine forest, 1–1900 m. Voucher: Tweedie 2961 (EA).

***Pappea capensis* Eckl. & Zeyh.** Habit: Tree. Habitat: Bushland, Wooded grassland, 1050–2300 m. Voucher: Aggundey 5 (EA).

## F78. Rutaceae

5 Genera, 6 Species

***Clausena anisata* (Willd.) Hook. f. ex Benth.** Habit: Shrub. Habitat: Secondary bushland, 1–2650 m. Vouchers: FOKP 11460, 11554 & 11657 (EA, HIB), Mbuni 196, 291 & 657 (EA).

***Harrisonia abyssinica* Oliv.** Habit: Tree. Habitat: Dry bushland, wooded grassland, 1–1650 m. Voucher: Tweedie 3793 (EA).



***Teclea nobilis* Delile** Habit: Tree. Habitat: Wooded grassland, 1050–2550 m. Vouchers: FOKP 11637 (EA, HIB), Mbuni 637 (EA), Lind 5083 (EA).

***Toddalia asiatica* (L.) Lam.** Habit: Liana. Habitat: Forest margin, grassland thicket, 1200–3000 m. Vouchers: SAJIT 005074 & Z0004 (EA, HIB), FOKP 11401 & 957 (EA, HIB), Nappier 1994 (EA).

***Vepris nobilis* (Delile) Mziray** Habit: Tree. Habitat: Woodland, 1–1400 m. Vouchers: SAJIT 004823 & 005083 (EA, HIB), FOKP 1028 (EA, HIB), Mbuni 194 (EA).

***Vepris simplicifolia* (Engl.) Mziray** Habit: Tree. Habitat: Woodland, 1–1400 m. Voucher: FOKP 1872 (EA, HIB).

## F79. Meliaceae

2 Genera, 2 Species

***Ekebergia capensis* Sparrm.** Habit: Tree. Habitat: Dry forest and riverine, 1300–2600 m. Voucher: SAJIT 005079 (EA, HIB).

***Lepidotrichillia volkensii* (Gurke) Leroy** Habit: Tree. Habitat: Dry forest, Forest margin, 1500–2000 m. Vouchers: FOKP 1068, 11411 & 11623 (EA, HIB), Mbuni 147 & 623 (EA).

## F80. Malvaceae

10 Genera, 34 Species

***Abutilon bidentatum* Hochst. ex A. Rich.** Habit: Herb. Habitat: Savanna, rocky places, 500–2000 m. Voucher: Lye 9057 (EA).

***Abutilon holstii* K. Schum. ex Engl.** Habit: Shrub. Habitat: Bushland up to 2000 m. Voucher: Webster 8758 (EA).

***Abutilon hirtum* (Lam.) Sweet** Habit: Herb. Habitat: Dry Bushland, 1–1350 m. Voucher: Mas 201 (EA).

***Abutilon longicuspe* Hochst. ex A. Rich.** Habit: Shrub. Habitat: Upland forest, 1650–3300 m. Voucher: SAJIT 004752 (EA, HIB).

***Abutilon mauritianum* (Jacq.) Medik.** Habit: Shrub. Habitat: Riverine, 0–2300 m. Voucher: Lindsay 2 (EA).

***Dombeya burgesiae* Gerrard ex Harv.** Habit: Tree. Habitat: Riverine, bushland, Woodland, thickets, 1200–3000 m. Vouchers: SAJIT 004764 (EA, HIB), FOKP 1286 & 11572 (EA, HIB), Mbuni 309 (EA).

***Dombeya torrida* (J.F. Gmel.) Bamps** Habit: Tree. Habitat: Hagenia forest, 1850–2700 m. Vouchers: FOKP 937 (EA, HIB), Lind et al. 5080 (EA).

***Dombeya quinqueseta* (Delile) Exell** Habit: Tree. Habitat: Wooded grassland, 1650–1750 m. Voucher: Webster 8757 (EA).

***Dombeya torrida* subsp. *erythroleuca* (K. Schum.) Seyani** Habit: Tree. Habitat: Secondary bushland, 1850–2700 m. Voucher: FOKP 11363 (EA, HIB).

***Dombeya rotundifolia* (Hochst.) Planch.** Habit: Tree. Habitat: Wooded grassland, 900–2250 m. Voucher: Webster 8757 (EA).

- Hibiscus aponeurus* Sprague & Hutch.** Habit. Shrub. Habitat: Grassland, 600–2600 m. Vouchers: Agnew et al. 10300 (EA), Lindsay 164 (EA).
- Hibiscus berberidifolius* A. Rich.** Habit. Shrub. Habitat: Upper forest edge, 1500–3600 m. Vouchers: SAJIT 007069 (EA, HIB), FOKP 973 (EA, HIB), Mbuni 080 (EA).
- Hibiscus diversifolius* Jacq.** Habit. Shrub. Habitat: Disturbed places, 1330–2800 m. Voucher: Brodhurst–Hill 8765 (EA).
- Hibiscus fuscus* Garcke** Habit. Shrub. Habitat: Permanent grassland, Disturbed places, 1400–2650 m. Vouchers: FOKP 11291 & 11498 (EA, HIB), Mbuni 234 & 687 (EA), Maas 6358 (EA), Symes 72 (EA).
- Hibiscus ludwigii* Eckl. & Zeyh.** Habit. Shrub. Habitat: Cleared forest, Roadside, 1800–3000 m. Vouchers: SAJIT 004472 & 006923 (EA, HIB), FOKP 11504 (EA), Mbuni 059, 117 & 240B (EA), Mabberley & McCall 2003 (EA).
- Hibiscus micranthus* L. f.** Habit. Shrub. Habitat: Grassland, 1500–2900 m. Vouchers: Agnew et al. 10333 (EA), Bogdan 4769 (EA), Mora 4039 (EA), Mus 97 (EA), Webster 8763 (EA).
- Grewia similis* K. Schum.** Habit. Shrub. Habitat: Bushland, Grassland, 700–2250 m. Vouchers: FOKP 1025 & 11667 (EA, HIB), Mbuni 667 (EA), Webster 8752 (EA).
- Grewia tephrodermis* K. Schum.** Habit. Tree. Habitat: Bushland, 700–2250 m. Voucher: Mbuni 226 & 672 (EA), FOKP 11490 & 11672 (EA, HIB).
- Grewia densa* K. Schum.** Habit. Shrub. Habitat: Bushland, 350–1500 m. Voucher: FOKP 11726 (EA, HIB), Mbuni 726 (EA).
- Kosteletzkya adoensis* (Hochst. ex A. Rich.) Mast.** Habit. Shrub. Habitat: Grassland, 1200–2650 m. Voucher: FOKP 1294 (EA, HIB).
- Kosteletzkya begoniifolia* Ulbr.** Habit. Shrub. Habitat: Grassland, 750–2100 m. Habitat: Voucher: FOKP 985 (EA, HIB).
- Malva verticillata* L.** Habit. Herb. Habitat: Grassland, 1500–3500 m. Voucher: Thulin & Tidings 241 (EA).
- Pavonia burchellii* (DC.) R.A. Dyer.** Habit. Shrub. Habitat: *Commiphora* Woodland, 100–2300 m. Voucher: Symes 65 (EA).
- Pavonia propinqua* Garcke** Habit. Shrub. Habitat: *Commiphora* Bushland, 550–1400 m. Voucher: SAJIT 004720 (EA, HIB).
- Pavonia urens* Cav.** Habit. Shrub. Habitat: Riverine Woodland, 1200–3000 m. Vouchers: FOKP 975 & 11403 (EA, HIB), Mbuni 073 & 103 (EA), Symes 513 (EA), Brown 12809 (EA), Kerfoot 8771 (EA).
- Sida acuta* Burm. f.** Habit. Herb. Habitat: Grassland, 5–2400 m. Disturbed places on grassland forest, 5–1300 m. Vouchers: Mbuni 245 (EA), FOKP 11509 (EA, HIB).
- Sida schimperiana* Hochst. ex A. Rich.** Habit. Shrub. Habitat: Dry grassland, bushland forest edges, 1390–2480 m. Voucher: Mbuni 245 (EA).
- Sida ovata* Forssk.** Habit. Herb. Habitat: Dry grassland, 15–2500 m. Voucher: Leippert 5042 (EA).
- Sida rhombifolia* L.** Habit. Herb. Habitat: Grassland, 900–2600 m. Vouchers: SAJIT 004735 (EA, HIB), Napier 1901 (EA), Agnew et al. 10275 (EA).

- Sida ternata* L. f.** Habit. Herb. Habitat: Bamboo forest, montane rain forest, 2000–3280 m. Vouchers: FOKP 11545 (EA, HIB), Mbuni 282 (EA), Symes 100 (EA).
- Sparmannia ricinocarpa* (Eckl. & Zeyh.) Kuntze** Habit. Shrub. Habitat: Forest edge, 2015–3380 m. Vouchers: FOKP 11711 (EA, HIB), Mbuni 711 (EA).
- Triumfetta rhomboidea* Jacq.** Habit. Shrub. Habitat: Upland forest, 1100–2200 m. Vouchers: FOKP 11445 (EA, HIB), Mbuni 181 (EA), Symes 215 (EA).
- Triumfetta brachyceras* K. Schum.** Habit. Shrub. Habitat: Forest edge, roadside, 1500–3000 m. Voucher: Hepper & Field 4983 (EA).
- Triumfetta cordifolia* A. Rich.** Habit. Shrub. Habitat: Montane forest edges, 1000–2600 m. Vouchers: FOKP 11333 (EA, HIB), Mbuni 069 (EA).

### F81. Thymelaeaceae

2 Genera, 8 Species

- Englerodaphne subcordata* (Meisn.) Engl.** Habit. Shrub. Habitat: Dry forest, Bushland, 1450–2500 m. Voucher: SAJIT 005147 (EA, HIB).
- Gnidia chrysantha* (Solms ex Schweinf.) Gilg** Habit. Herb. Habitat: Woodland, 2000–2350 m. Voucher: Symes 382 (EA).
- Gnidia fastigiata* Rendle** Habit. Shrub. Habitat: Subalpine grassland, 2300–3000 m. Vouchers: Dale 3175 (EA), Townsend 2370 (EA).
- Gnidia glauca* (Fresen.) Gilg** Habit. Tree. Habitat: Forest margin, Bamboo Zone, 2250–3300 m. Vouchers: FOKP 1244 & 11266 (EA), Mbuni 002 (EA), Birnie 480 (EA), Kokwaro 2524 (EA).
- Gnidia kraussiana* Meisn.** Habit. Herb. Habitat: Grassland & rocky hillside, 1650–2650 m. Voucher: Lind 2845 (EA).
- Gnidia latifolia* (Oliv.) Gilg.** Habit. Shrub. Habitat: Bushed grassland, 1–1950 m. Vouchers: SAJIT 006814 (EA, HIB), FOKP 10914 (EA, HIB).
- Gnidia lamprantha* Gilg.** Habit. Shrub. Habitat: Woodland, Bushland, 1200–2150 m. Vouchers: FOKP 11267 (EA, HIB), Webster 8740 (EA).
- Struthiola thomsonii* Oliv.** Habit. Shrub. Habitat: Rocky grassland, 2000–3500 m. Vouchers: SAJIT 004793 (EA, HIB), Mbuni 104 (EA), Bogdan 4516 (EA), Wamukoya 128 (EA), Rauh 676 (EA).

### F82. Moringaceae

1 Genus, 1 Species

- Moringa oleifera* Lam.** Habit. Tree. Habitat: Grassland, Bushland, 15–1350 m. Voucher: Bogdan 4517A (EA).

### F83. Salvadoraceae

1 Genus, 1 Species

- Salvadora persica* L.** Habit. Herb. Habitat: Grassland, Bushland, 1–1850 m. Voucher: FOKP 1253 (EA, HIB).



**F84. Resedaceae**

1 Genus, 1 Species

*Caylusea abyssinica* (Fresen.) Fisch. & C.A. Mey. Habit: Herb. Habitat: Disturbed, medium altitude, 1100–2800 m. Vouchers: FOKP 11511 (EA, HIB), Mbuni 247 (EA).

**F85. Capparaceae**

4 Genera, 6 Species

*Cleome gynandra* L. Habit: Herb. Habitat: Dry bushland, 1–2200 m. Voucher: Mabberley & McCall 100 (EA).

*Cadaba farinosa* Forssk. Habit: Shrub. Habitat: Bushland, 1–1900 m. Vouchers: FOKP 1254 & 11338 (EA, HIB).

*Capparis erythrocarpos* Isert. Habit: Shrub. Habitat: Bushed or wooded grassland, 1100–1800 m. Voucher: Tweedie 1931 (EA).

*Maerua decumbens* (Brongn.) DeWolf Habit: Shrub. Habitat: Bushland, 1–1800 m. Voucher: FOKP 1248 (EA, HIB).

*Maerua parvifolia* Pax Habit: Shrub. Habitat: Bushland, 700–1650 m. Voucher: Tweedie 1571 (EA).

*Maerua triphylla* A. Rich. Habit: Shrub. Habitat: Bushland, 1–2300 m. Vouchers: SAJIT Z0060 (HIB), FOKP 11304 & 11332 (EA, HIB).

**F86. Brassicaceae**

4 Genera, 4 Species

*Arabis alpina* L. Habit: Herb. Habitat: Highland grassland, 2800–3500 m. Voucher: Mabberley & McCall 211 (EA).

*Cardamine africana* L. Habit: Herb. Habitat: Highland grassland, 2200–3300 m. Vouchers: FOKP 1723 & 11615 (EA, HIB), Mbuni 615 (EA).

*Nasturtium officinale* R. Br. Habit: Herb. Habitat: Highland streamside, 1500–2700 m. Voucher: FOKP 1731 (EA, HIB).

*Thlaspi alliaceum* L. Habit: Herb. Habitat: Bamboo forest, 3000–3500 m. Voucher: Mabberley & McCall 258 (EA).

**F87. Santalaceae**

4 Genera, 5 Species

*Osyridicarpos schimperianus* (Hochst. ex A. Rich.) A. DC. Habit: Shrub. Habitat: Rocky site, thickets Bushland, Grassland, 1550–2415 m. Vouchers: Mbuni 750 (EA), FOKP 11750 (EA).

*Osyris lanceolata* Hochst. & Steud. Habit: Shrub. Habitat: Rocky site, forest thicket, bushland, grassland, 900–2550 m. Vouchers: SAJIT 004835 (EA, HIB), FOKP 1093, 1094, 11269 & 11270 (EA, HIB), Mbuni 006 (EA).

***Thesium radicans* Hochst. ex A. Rich.** Habit: Herb. Habitat: Grassland, 1800–3000 m. Voucher: SAJIT 006858 (EA, HIB).

***Thesium ussanguense* Engl.** Habit: Herb. Habitat: Grassland, around 2100 m. Voucher: Friis & Hansen 2508 (EA).

***Viscum tuberculatum* A. Rich.** Habit: Parasitic herb. Habitat: Dry woodland forest, 1650–2400 m. Vouchers: SAJIT 006852 & 007078 (EA, HIB), FOKP 1106 & 10952 (EA, HIB), Mbuni 727 (EA).

#### **F88. Loranthaceae**

6 Genera, 11 Species

***Englerina woodfordioides* (Schweinf.) Balle.** Habit: Shrub. Habitat: Montane forest, 1600–3050 m. Vouchers: SAJIT 006885 & 006905 (EA, HIB), FOKP 1029 & 11631 (EA, HIB), Mbuni 631 (EA), Bogdan 4512 (EA), Mabberley 33 (EA).

***Erianthemum dregei* (Eckl. & Zeyh.) Tiegh.** Habit: Shrub. Habitat: Bushland, 0–2950 m. Vouchers: SAJIT 004846 & 004847 (EA, HIB), FOKP 1103 & 11329 (EA, HIB).

***Oncocalyx fischeri* (Engl.) M.G. Gilbert** Habit: Shrub. Habitat: Bushland, 550–2100 m. Vouchers: Lucas 175 (EA), Kazuaki 28 (EA).

***Oncocalyx sulfureus* (Engl.) Wiens & Polhill** Habit: Shrub. Habitat: Dry upland forest, Bushland, 550–2680 m. Voucher: SAJIT Z0024 (EA, HIB).

***Oncocalyx ugogensis* (Engl.) Wiens & Polhill** Habit: Shrub. Habitat: Dry Bushland 10–1425 m. Voucher: Carter & Stannard 79 (EA).

***Phragmanthera dschallensis* (Engl.) M.G. Gilbert.** Habit: Shrub. Habitat: Wooded grassland, 1400–1900 m. Vouchers: SAJIT 006865 (EA, HIB), FOKP 11373 (EA, HIB), Mbuni 109 (EA), Wiens 4504 (EA).

***Phragmanthera usuiensis* (Oliv.) M.G. Gilbert.** Habit: Shrub. Habitat: Montane forest, 1150–2600 m. Vouchers: SAJIT 004841 (EA, HIB), FOKP 11323 (EA, HIB).

***Plicosepalus curviflorus* (Benth. ex Oliv.) Tiegh.** Habit: Shrub. Habitat: Wooded grassland, 500–2320 m. Vouchers: FOKP 11340 & 1258 (EA, HIB), Webster 8813 (EA).

***Plicosepalus meridianus* (Danser) Wiens & Polhill** Habit: Shrub. Habitat: Dry bushland, 100–1550 m. Vouchers: Tweedie 2974 (EA), Archer 494 (EA).

***Plicosepalus sagittifolius* (Engl.) Danser** Habit: Shrub. Habitat: Dry bushland & wooded grassland, 150–2100 m. Voucher: Lucas 186 (EA).

***Tapinanthus buvumae* (Rendle) Danser** Habit: Climber Habitat: Wooded grassland, up to 1980 m. Vouchers: SAJIT 004831 & 005060 (EA, HIB).

#### **F89. Plumbaginaceae**

1 Genus, 1 Species

***Plumbago zeylanica* L.** Habit: Shrub. Habitat: Dry bushland, 700–1860 m. Voucher: Mabberley 87 (EA).

**F90. Polygonaceae**

3 Genera, 9 Species

***Harpagocarpus snowdenii* Hutch. & Dandy** Habit: Herb. Habitat: Highland forest up to 1650 m. Vouchers: FOKP 11541 (EA, HIB), Mbuni 278 (EA).

***Persicaria decipiens* (R. Br.) K.L. Wilson** Habit: Herb. Habitat: Waterside grassland, 1000–3170 m. Vouchers: FOKP 978 & 1129 (EA, HIB).

***Persicaria nepalensis* (Meisn.) Miyabe** Habit: Shrub. Habitat: Wet forest zones, 2250–3500 m. Vouchers: SAJIT 004740 (EA HIB), Mbuni 043 (EA), Ivens 1250 (EA).

***Persicaria senegalensis* (Meisn.) Soják** Habit: Herb. Habitat: Waterside grassland up to 2850 m. Vouchers: FOKP 11730 (EA, HIB), Mbuni 730(EA).

***Persicaria setosula* (A. Rich.) K.L. Wilson** Habit: Herb. Habitat: Higher altitudes in waterside, 1330–3000 m. Vouchers: FOKP 1734, 11307 & 11357 (EA, HIB), Mbuni 043 & 093 (EA).

***Persicaria strigosa* (R. Br.) Nakai** Habit: Herb. Habitat: Grassland, 1600–3000 m. Voucher: Ivens 1250 (EA).

***Rumex abyssinicus* Jacq.** Habit: Herb. Habitat: Upper forest levels, 1600–2800 m. Voucher: Townsend 2385 (EA).

***Rumex steudelii* Hochst. ex A. Rich.** Habit: Herb. Habitat: Upper forest, streamside, around 1200 m. Vouchers: FOKP 1203 & 1225 (EA, HIB), Mbuni 089 (EA, HIB).

***Rumex usambarensis* (Dammer) Dammer.** Habit: Herb. Habitat: Secondary shrubland, 900–2300 m. Vouchers: FOKP 11565 (EA, HIB), Mbuni 302 (EA).

**F91. Caryophyllaceae**

4 Genera, 7 Species

***Cerastium afromontana* T.C.E. Fr.** Habit: Herb. Habitat: Grassland, 2300–3500 m. Voucher: Symes 648 (EA).

***Cerastium lanceolatum* (Poir.) Volponi** Habit: Herb. Habitat: Wet Grassland, 1500–3500 m. Vouchers: SAJIT 006860 (EA, HIB), FOKP 1063 (EA, HIB).

***Cerastium octandrum* Hochst. ex A. Rich.** Habit: Herb. Habitat: Grassland, 2500–3500 m. Voucher: Knight 95 (EA).

***Lychnis crassifolia* (T.C.E. Fr.) M. Popp** Habit: Herb. Habitat: Grassland, 3150–3350 m. Voucher: Thulin & Tidigs 232 & 3150 (EA).

***Silene gallica* L.** Habit: Herb. Habitat: Alpine zone, 1900–3500 m. Vouchers: FOKP 1801 & 11306 (EA, HIB), Mbuni 042 (EA), Symes 125 (EA).

***Stellaria mannii* Hook. f.** Habit: Herb. Habitat: Wet highland forest, 1550–2500 m. Vouchers: FOKP 1121 & 1224 (EA, HIB).

***Stellaria sennii* Chiov.** Habit: Herb. Habitat: Wet highland forest, 2020–3500 m. Vouchers: Mabberley & McCall 203 (EA), Thulin & Tidigs 238 (EA).



**F92. Amaranthaceae**

7 Genera, 11 Species.

- Achyranthes aspera* L. Habit: Herb. Habitat: Woodland, disturbed dry places, 0–3080 m. Vouchers: Mbuni 81 (EA), FOKP 11345 (EA, HIB).
- Achyranthes aspera* var. *sicula* L. Habit: Herb. Habitat: Disturbed dry places, 0–3080 m. Voucher: Part II Botany 15 (EA)
- Aerva lanata* (L.) Juss. Habit: Shrub. Habitat: Open ground, 1–2200 m. Vouchers: FOKP 11485 (EA, HIB), Mbuni 221 (EA).
- Amaranthus hybridus* L. Habit: Herb. Habitat: Disturbed ground, 1500–2600 m. Vouchers: FOKP 11516 (EA, HIB), Mbuni 252 (EA).
- Amaranthus spinosus* L. Habit: Herb. Habitat: Wooded grassland, 0–2000 m. Vouchers: FOKP 11486 (EA, HIB), Mbuni 222 (EA).
- Celosia anthelminthica* Asch. Habit: Climber. Habitat: Dry bushland 500–2300 m. Voucher: Mabberley & McCall 107 (EA).
- Chenopodium opulifolium* Schrad. ex W.D.J. Koch & Ziz Habit: Herb. Habitat: Cultivated land, roadside, waste places, 1600–2300 m. Vouchers: FOKP 11342 (EA, HIB), Mbuni 078 (EA).
- Cyathula cylindrica* Moq. Habit: Herb. Habitat: Rocky scarps with bushland, 1300–3240 m. Voucher: SAJIT 007115 (EA, HIB).
- Cyathula polycephala* Baker Habit: Herb. Habitat: Grassland, woodland, 1600–3000 m. Voucher: FOKP 1126 (EA, HIB).
- Cyathula uncinulata* (Schrad.) Schinz. Habit: Herb. Habitat: Forest edges, 1500–2900 m. Vouchers: FOKP 1126 (EA, HIB), Part II Botany 26 (EA).
- Pupalia lappacea* (L.) Juss. Habit: Herb. Habitat: Dry bushland, 10–2060 m. Vouchers: FOKP 11693 & 11721 (EA, HIB), Mbuni 693 & 721 (EA).

**F93. Phytolaccaceae**

1 Genus, 2 Species

- Phytolacca dodecandra* L'Hér. Habit: Shrub. Habitat: Moist forest margin, Riverine forest, 1650–2450 m. Vouchers: SAJIT 004749 & 006884 (EA, HIB), FOKP 969 & 1038 (EA, HIB).
- Phytolacca octandra* L. Habit: Shrub. Habitat: Moist forest margin, 1500–2400 m. Vouchers: SAJIT 004776, 005085 (EA, HIB), FOKP 1111 & 11327 (EA, HIB), Mbuni 063 (EA).

**F94. Nyctaginaceae**

1 Genus, 1 Species

- Boerhavia plumbaginea* Cav. Habit: Herb. Habitat: Grassland, 600–2030 m. Voucher: FOKP 1250 (EA, HIB).

**F95. Molluginaceae**

1 Genus, 1 Species

***Corrigiola litoralis* L.** Habit: Herb. Habitat: Mountain grassland roadside, 2350–3500 m. Voucher: Mabberley & McCall 220 (EA).

**F96. Basellaceae**

1 Genus, 1 Species

***Basella alba* L.** Habit: Shrub. Habitat: Riverine forest margin and hedges, 1500–3000 m. Vouchers: FOKP 982 & 11355 (EA, HIB), Mbuni 091 (EA).

**F97. Talinaceae**

1 Genus, 2 Species

***Talinum caffrum* (Thunb.) Eckl. & Zeyh.** Habit: Herb. Habitat: Bushland, 1000–2000 m. Voucher: Greenway 9890 (EA).

***Talinum arnotii* Hook. f.** Habit: Herb. Habitat: Grassland, 800–2000 m. Voucher: Carter & Stannard 62 (EA).

**F98. Cactaceae**

1 Genus, 1 Species

***Rhipsalis baccifera* (J.S. Muell.) Stearn** Habit: Epiphyte. Habitat: Dry forest, 150–2300 m. Voucher: FOKP 988 (EA, HIB).

**F99. Cornaceae**

1 Genus, 1 Species

***Cornus volkensii* Harms** Habit: Tree. Habitat: Bamboo zone, wet upland, 2100–3200 m. Vouchers: SAJIT 006804 & 007123 (EA, HIB), FOKP 1058, 11445, 10904 & 11544 (EA, HIB), Mbuni 181 & 281 (EA).

**F100. Balsaminaceae**

1 Genus, 9 Species

***Impatiens elegantissima* Gilg** Habit: Herb. Habitat: Streamsides in wet forest, 1000–2750 m. Vouchers: Hepper & Field 5017, Maas 4774 (EA), Webster 8737 (EA).

***Impatiens hochstetteri* Warb.** Habit: Herb. Habitat: Streamsides in wet forest, 1000–2750 m. Vouchers: SAJIT 004858, 005097 & Z0014 (EA, HIB), FOKP 1303 & 11382 (EA, HIB), Knox 3355 (EA), Mabberley 485 (EA).

***Impatiens boehnelii* T.C.E. Fr.** Habit: Herb. Habitat: Upper forest level, 1500–3470 m. Vouchers: SAJIT 006810 (EA, HIB), FOKP 10910 (EA, HIB), Hughes 2 (EA).

***Impatiens irvingii* Hook. f.** Habit: Herb. Habitat: Wet forest floor up to 2000 m.  
Voucher: Webster 8738 (EA).

***Impatiens meruensis* Gilg.** Habit: Herb. Habitat: Highland forest, marshes and streamside, 1000–3550 m. Vouchers: SAJIT 004780 (EA, HIB), FOKP 1720, 11385 & 11528 (EA, HIB), Mbuni 120 & 264 (EA), Lind 2828 (EA).

***Impatiens meruensis* subsp. *cruciata* (T.C.E. Fr.) Grey–Wilson.** Habit: Herb. Habitat: Highland forest, marshes & streamside, 1000–3550 m. Vouchers: SAJIT 005089 (EA, HIB), FOKP 11643 (EA, HIB), Mbuni 643 (EA), Lind 2828 (EA), Knox 3356 (EA).

***Impatiens pseudoviola* Gilg** Habit: Herb. Habitat: Lower Highland forest, 1500–3300 m. Voucher: Hughes 1 (EA).

***Impatiens sodenii* Engl. & Warb.** Habit: Herb. Habitat: Escarpment zones with frequent mist, 1000–2700 m. Vouchers: SAJIT 004733 (EA, HIB).

***Impatiens tinctoria* A. Rich** Habit: Herb. Habitat: Highland forest areas, streamside, 1800–3550 m. Vouchers: SAJIT 004789 & 006819 (EA, HIB), FOKP 10919, 11356 & 11644 (EA, HIB), Webster 8737 (EA), Mbuni 092 & 644 (EA).

#### **F101. Sapotaceae**

2 Genera, 2 Species

***Chrysophyllum oliviforme* subsp. *angustifolium* (Lam.) T.D. Penn.** Habit: Tree. Habitat: Moist forest, 1500–2200 m. Voucher: FOKP 1067 (EA, HIB).

***Pouteria adolfi–friedericii* (Engl.) A. Meeuse** Habit: Tree. Habitat: Moist forest, 1500–2400 m. Vouchers: SAJIT 006904 (EA, HIB), FOKP 11004 (EA, HIB), Colby H134 (EA).

#### **F102. Ebernaceae**

2 Genera, 3 Species

***Diospyros scabra* (Chiov.) Cufod.** Habit: Tree. Habitat: Rocky hillsides, 400–1050 m. Voucher: FOKP 11331 (EA, HIB).

***Euclea divinorum* Hiern** Habit: Shrub. Habitat: Bushed grassland, 1–2700 m. Vouchers: FOKP 1099, 1107 & 11461 (EA, HIB), Mbuni 197 & 743 (EA).

***Euclea racemosa* L.** Habit: Tree. Habitat: Bushland, 1–2250 m. Vouchers: FOKP 11659 (EA, HIB), Mbuni 659 (EA).

#### **F103. Primulaceae**

4 Genera, 5 Species

***Anagallis hexamera* P. Taylor.** Habit: Herb. Habitat: streamside marshes, 2275–2600 m. Voucher: Hale 209 (EA).

***Anagallis Serpens* subsp. *meyeri–johannis* (Endl.) P. Taylor** Habit: Herb. Habitat: Upland dry forest, 2600–3550 m. Vouchers: FOKP 988 (EA, HIB), Thulin & Tidigs 221 (EA).



***Maesa lanceolata* Forssk.** Habit: Shrub. Habitat: Widespread secondary forest, Forest margin, 1300–2853 m. Vouchers: SAJIT 004770 & 005138 (EA, HIB), FOKP 1033 (EA, HIB).

***Myrsine africana* L.** Habit: Shrub. Habitat: Upland dry forest, 1500–3000 m. Vouchers: SAJIT 004801 (EA, HIB), FOKP 11385 (EA, HIB), Mbuni 009 & 757 (EA), Hepper & Field 5027 (EA), Lind & Agnew 5160 (EA).

***Rapanea melanophloeos* (L.) Mez.** Habit: Tree. Habitat: Upland forest, to the edge of moorland, 1200–3550 m. Vouchers: SAJIT 006806 (EA), FOKP 10906 & 11267 (EA, HIB), Mbuni 003 (EA), Knight 87 (EA).

#### F104. Ericaceae

2 Genera, 6 Species

***Agarista salicifolia* (Lam.) G. Don** Habit: Tree. Habitat: Secondary forest, high altitude bushland, forest edge, 2100–3300 m. Vouchers: SAJIT 004758 (EA, HIB), FOKP 1086 & 1717 (EA, HIB), Friis & Hansen 2513 (EA), Thulin & Tidigs 257 (A).

***Erica arborea* L.** Habit: Shrub. Habitat: Heath, woodland, Rocky, bushland, 2300–2700 m. Vouchers: SAJIT 004801 (EA, HIB), Thulin & Tidigs 92 (EA).

***Erica filago* (Alm & T.C.E. Fr.) Beentje** Habit: Shrub. Habitat: Heath zones, 2500–3550 m. Voucher: Thulin & Tidings 257 (EA).

***Erica silvatica* (Welw. ex Engl.) Beentje** Habit: Shrub. Habitat: Moorlands, alpine zones, 2300–3550 m. Voucher: Bogdan 4984 (EA).

***Erica ventricosa* Thunb.** Habit: Shrub. Habitat: Boggy moorlands, heath zones, 2500–3550 m. Voucher: SAJIT 004807 (EA, HIB).

***Erica whyteana* Britten** Habit: Shrub. Habitat: Wooded grassland, 2700–3550 m. Vouchers: Thulin & Tidings 89 (EA), Bogdan 4999 (EA).

#### F105. Rubiaceae

25 Genera, Species 64

***Agathisanthemum globosum* (Hochst. ex A. Rich.) Klotzsch** Habit: Herb. Habitat: Wooded grassland, 1600–2170 m. Vouchers: Lewis 5987 (EA), Blake 2132 (EA).

***Anthospermum usambarense* K. Schum.** Habit: Shrub. Habitat: Ericaceous belt, alpine bushland, 2150–3350 m. Voucher: Thulin & Tidigs 251 (EA).

***Anthospermum herbaceum* L. f.** Habit: Herb. Habitat: Forest edge, wet forest zone, 1560–2650 m. Vouchers: Mbuni 029 (EA, HIB), Symes 211 (EA).

***Canthium pseudosetiflorum* Bridson** Habit: Shrub. Habitat: Evergreen bushland, dry woodland, 750–1750 m. Voucher: Bridson 1079 (EA).

***Coffea eugenioides* S. Moore** Habit: Shrub. Habitat: Dry bushland, 1450–2250 m. Voucher: Thomas 232 (EA).

***Conostomium quadrangulare* (Rendle) Cufod.** Habit: Herb. Habitat: Rocky bushland, 60–1950 m. Voucher: Napier 2067 (EA).

***Fadogia cienkowskii* Schweinf.** Habit: Shrub. Habitat: Wooded grassland, 1800–1950 m. Voucher: Napier 2005 (EA).

- Fagaropsis angolensis* (Engl.) H.M. Gardner Habit: Tree. Habitat: Dry Forest, 1150–2100 m. Voucher: Lindsay 16 (EA).
- Galiniera coffeoides* Delile Habit: Shrub. Habitat: Moist forest, 1850–2400 m. Vouchers: Friis & Hansen 2552 (EA), Dale 907(EA).
- Galiniera saxifraga* (Hochst.) Bridson Habit: Shrub. Habitat: Moist forest, 1850–2400 m. Vouchers: SAJIT 005072 & 006795 (EA, HIB), FOKP 936, 1074, 10895, 11361 & 11412 (EA, HIB), Mbuni 148 (EA).
- Galium aparine* L. Habit: Climber. Habitat: Grassland, 1600–3200 m. Voucher: SAJIT 006856 (EA, HIB).
- Galium aparinoides* Forssk. Habit: Climber. Habitat: Montane forest edges, 1600–3500 m. Vouchers: FOKP 11404 (EA, HIB), Mbuni 030 (EA), Verdcourt & Taylor et al. 2434 (EA).
- Galium scioanum* Chiov. Habit: Herb. Habitat: Moist woodland, 1800–2700 m. Vouchers: FOKP 1138 & 11536 (EA, HIB), Mbuni 272 (EA), Thulin & Tidings 175 (EA), Tweedie 2699 (EA).
- Galium kenyanum* Verdc. Habit: Herb. Habitat: Alpine grassland, 2880–3540 m. Voucher: Tweedie 3864 (EA), Mabberley 51 (EA).
- Galium ruwenzoriense* (Cortesi) Ehrend. Habit: Herb. Habitat: Forest edges & bushland, 2700–3500 m. Vouchers: Knox 3387 (EA), Thulin & Tidigs 101 (EA).
- Galium thunbergianum* Eckl. & Zeyh. Habit: Herb. Habitat: Montane forest, 2050–3550 m. Vouchers: SAJIT 006857 (EA, HIB), FOKP 1060 (EA, HIB), Knox 3376 (EA).
- Gardenia ternifolia* Schumach. & Thonn. Habit: Tree. Habitat: Wooded grassland, riverine, 1100–2500 m. Voucher: Champion 189 (EA).
- Gardenia volkensii* K. Schum. Habit: Shrub. Habitat: Riverine woodland, wooded grassland, 1–1750 m. Vouchers: SAJIT 006878 (EA, HIB), FOKP 11310 (EA, HIB), Rindsay 1958 (EA).
- Keetia gueinzii* (Sond.) Bridson. Habit: Climber. Habitat: Moist forest, bushland, riverine, 1300–2500 m. Vouchers: SAJIT 004819 & 005066 (EA, HIB), FOKP 1017 (EA, HIB), Mbuni 052 (EA, HIB), Mabberley 155 (EA), Lind 2849 (EA), Friis & Hansen 2545 (EA).
- Kohautia coccinea* Royle Habit: Shrub. Habitat: Riverine woodland, rocky bushland, dry grassland, 1250–2500 m. Vouchers: Faden 144 (EA), Symes 208 (EA).
- Meyna tetraphylla* (Schweinf. ex Hiern) Robyns. Habit: Shrub. Habitat: Riverine woodland, rocky bushland, 1–1400 m. Voucher: Faden 77 & 792 (EA).
- Mitracarpus villosus* (Sw.) DC. Habit: Herb. Habitat: As weed on cultivated ground, 60–1400 m. Voucher: SAJIT Z0008 (HIB).
- Oldenlandia corymbosa* var. *nana* (Bremek.) Verdc. Habit: Herb. Habitat: Dry areas, 1–2500 m. Voucher: Symes 754 (EA).
- Oldenlandia corymbosa* var. *caespitosa* (Benth). Habit: Herb. Habitat: Dry areas, 1–2500 m. Voucher: Verdcourt 736 (EA).
- Oldenlandia herbacea* (L.) Roxb. Habit: Herb. Habitat: Dry grassland, 75–2400 m. Vouchers: FOKP 11315 (EA, HIB), Mbuni 051 (EA).

- Oldenlandia lancifolia* (Schumach.) DC.** Habit: Herb. Habitat: Wooded grassland, 400–2350 m. Voucher: SAJIT 007055 (EA, HIB).
- Oldenlandia monanthos* (Hochst. ex A. Rich.) Hiern:** Habit: Herb. Habitat: Montane grassland, 1650–3150 m. Vouchers: SAJIT 006820 (EA, HIB), FOKP 10920 (EA, HIB).
- Oxyanthus speciosus* DC.** Habit: Tree. Habitat: Forest riverine, 1400–2200 m. Vouchers: SAJIT 006898 (EA, HIB), FOKP 1275, 1736 & 11463 (EA, HIB), Mbuni 199 (EA).
- Oxyanthus speciosus* subsp. *stenocarpus* (K. Schum.) Bridson** Habit: Tree. Habitat: Riverine forest, 1400–2200 m. Voucher: SAJIT 007095 (EA, HIB).
- Pavetta abyssinica* Fresen.** Habit: Shrub. Habitat: Forest riverine, secondary bushland, 1500–2550 m. Vouchers: SAJIT 005069 (EA, HIB), FOKP 1084, 1719 & 11607 (EA, HIB), Mbuni 607 (EA).
- Pavetta crassipes* K. Sch.** Habit: Shrub. Habitat: Wooded grassland, 900–1500 m. Voucher: Nyamwaya 28 (EA).
- Pavetta dolichantha* Bremek.** Habit: Shrub. Habitat: Bushland and rocky slopes, 750–1650 m. Voucher: Tweedie 3029 (EA).
- Pavetta elliottii* K. Schum. & K. Krause.** Habit: Shrub. Habitat: Bushland, grassland, forest margin, 1400–1900 m. Voucher: Pole et al. 1512 (EA).
- Pavetta gardeniifolia* Hochst. ex A. Rich.** Habit: Shrub. Habitat: Rocky, bushland, 7005–2500 m. Vouchers: FOKP 11429 (EA, HIB), Mbuni 165 (EA).
- Pentas decora* S. Moore.** Habit: Herb. Habitat: Wooded grassland, 1590–2700 m. Voucher: Lucas 200 (EA).
- Pentas lanceolata* (Forssk.) Defflers.** Habit: Shrub. Habitat: Forest edge, 1200–2830 m. Voucher: Paswa 49 (EA).
- Pentas lanceolata* var. *leucaster* (K. Krause) Verdc.** Habit: Herb. Habitat: Forest edges, 1200–2830 m. Vouchers: Napier 1902 (EA), Lind 5093 (EA).
- Pentas longiflora* Oliv.** Habit: Herb. Habitat: Bushed grassland, 500–2500 m. Vouchers: FOKP 1095, 11299 & 11621 (EA, HIB), Mbuni 621 (EA).
- Pentas parvifolia* Hiern.** Habit: Shrub. Habitat: Bushed grassland, 650–2400 m. Vouchers: FOKP 11467 (EA, HIB), Mbuni 203 (EA).
- Pentas pubiflora* S. Moore** Habit: Shrub. Habitat: Montane and riverine forest, 1800–2400 m. Vouchers: FOKP 11290 (EA, HIB), Mbuni 026 (EA).
- Pentas zanzibarica* (Klotzsch) Vatke** Habit: Shrub. Habitat: Riverine forest, 1800–2440 m. Vouchers: FOKP 11620 (EA, HIB), Mbuni 620 (EA).
- Pentas schimperiana* Vatke** Habit: Herb. Habitat: Forest clearing, 2100–2700 m. Vouchers: SAJIT 004741 (EA, HIB), FOKP 1008 (EA, HIB), Tweedie 2801 (EA), Gardener 2852 (EA).
- Pentanisia ouranogyne* S. Moore.** Habit: Herb. Habitat: Grassland, 300–2400 m. Voucher: Thomasson & Hansson 91A (EA).
- Pentanisia schweinfurthii* Hiern.** Habit: Herb. Habitat: Wooded grassland, 1500–2480 m. Voucher: Symes 278 (EA).

- Psychotria fractinervata* **E.M.A. Petit** Habit: Shrub. Habitat: *Ocotea* forest, 1900–2550 m. Voucher: FOKP 1873 (EA, HIB).
- Psychotria kirkii* **Hiern**. Habit: Shrub. Habitat: Bushland, Wooded grassland, 250–2250 m. Vouchers: FOKP 11298 & 11437 (EA, HIB), Mbuni 173 (EA).
- Psychotria mahonii* var. *puberula* (**E.M.A. Petit**) **Verdc.** Habit: Tree. Habitat: Swampy forest, riverine, 1400–2400 m. Voucher: Gardener 1398a (EA).
- Psychotria mahonii* var. *pubescens* (**Robyns**) **Verdc.** Habit: Tree. Habitat: Swampy forest, riverine, 1400–2400 m. Voucher: Tweedie 2801 (EA).
- Pyrex schimperiana* (**A. Rich.**) **Bridson** Habit: Tree. Habitat: Riverine, 1400–2400 m. Vouchers: FOKP 11474 (EA, HIB), Mbuni 210 (EA).
- Richardia brasiliensis* **Gomes** Habit: Herb. Habitat: Grassland, 1500–2010 m. Voucher: FOKP 11489 (EA, HIB), Mbuni 225 (EA).
- Rubia cordifolia* **L.** Habit: Herb. Habitat: Woodland clearings, riverine bushland, 1240–3120 m. Voucher: Mungai 84 & 128 (EA).
- Rutidea orientalis* **Bridson** Habit: Shrub. Habitat: Woodland, 1400–2400 m. Vouchers: SAJIT 006891 (EA, HIB), FOKP 10991 (EA, HIB).
- Rytigynia neglecta* (**Hiern**) **Robyns** Habit: Tree. Habitat: Riverine forest, 1350–2200 m. Vouchers: FOKP 1809 (EA, HIB), Paswa 54 (EA).
- Rytigynia uhligii* (**K. Schum. & K. Krause**) **Verdc.** Habit: Tree. Habitat: Wet forest, 1050–2400 m. Vouchers: FOKP 11404, 11452 & 11603 (EA, HIB), Mbuni 140, 188 & 603 (EA, HIB).
- Spermacoce minutiflora* (**K. Schum.**) **Verdc.** Habit: Herb. Habitat: Woodland, grassland, 1500–2350 m. Voucher: Napier 1973 (EA).
- Spermacoce princeae* (**K. Schum.**) **Verdc.** Habit: Herb. Habitat: Wet forest, 1470–2650 m. Vouchers: SAJIT 006926 (EA, HIB), FOKP 1129 (EA, HIB).
- Spermacoce sphaerostigma* (**A. Rich.**) Habit: Herb. Habitat: Grassland, 900–2200 m. Voucher: Symes 198 & 756 (EA).
- Coptosperma graveolens* (**S. Moore**) **Bremek.** Habit: Tree. Habitat: Bushland, forest thicket, 1–2500 m. Vouchers: FOKP 11429 (EA, HIB), Mbuni 165 (EA).
- Coptosperma pavettoides* (**Harv.**) **Sim** Habit: Shrub. Habitat: Secondary bushland, 1200–1750 m. Voucher: FOKP 1009 (EA, HIB).
- Vangueria apiculata* **K. Schum.** Habit: Tree. Habitat: Thickets, riverine, wooded grassland, bushland, 950–2300 m. Vouchers: SAJIT 004742 & 005061 (EA, HIB), Nyamwaya 31 (EA).
- Vangueria infausta* **Burch.** Habit: Shrub. Habitat: Thickets, riverine, wooded grassland, bushland, 1–2100 m. Vouchers: SAJIT 006853 (EA, HIB), FOKP 10953 (EA, HIB).
- Vangueria linearisepala* **K. Schum.** Habit: Shrub. Habitat: Wooded grassland, bushland, 750–2100 m. Voucher: Friis & Hansen 2539 (EA).
- Vangueria madagascariensis* **J.F. Gmel.** Habit: Tree. Habitat: Riverine, wooded grassland, bushland, 750–2100 m. Vouchers: Mbuni 751 (EA), Maundu & Musya 31 (EA).
- Vangueria volkensii* **K. Schum.** Habit: Tree. Habitat: Riverine, bushland, 900–2300 m. Vouchers: FOKP 956, 1023, 1075 & 11405 (EA, HIB), Mbuni 141, 738 (EA), Bridson 105 (EA).



**F106. Gentianaceae**

3 Genera, 11 Species

***Chironia elgonensis* Bullock.** Habit: Herb. Habitat: Swamps, 1705–2325 m. Voucher: Symes 1406 (EA).

***Sebaea brachyphylla* Griseb.** Habit: Herb. Habitat: Wooded grassland, 1650–3470 m. Vouchers: Thulin 218 (EA), Verdcourt 2439 (EA).

***Sebaea grandis* (E. Mey.) Steud.** Habit: Herb. Habitat: Wooded grassland on shallow soil, 1550–2160 m. Voucher: Symes 1010 (EA).

***Swertia abyssinica* Hochst.** Habit: Herb. Habitat: Alpine zone, 2000–3300 m. Vouchers: Mabberley 580 (EA), Nemomissa 970830 (EA).

***Swertia brownii* J. Shah.** Habit: Herb. Habitat: Wooded grassland, 1800–2600 m. Vouchers: SAJIT 006925 (EA, HIB), FOKP 1128 (EA, HIB).

***Swertia crassiuscula* Gilg** Habit: Herb. Habitat: Wet stony, heath, lower alpine zones, 2700–3500 m. Vouchers: Dale 3263 & 3264 (EA).

***Swertia kilimandscharica* Engl.** Habit: Herb. Habitat: Montane, subalpine, 2100–3550 m. Vouchers: FOKP 11282 (EA), Mbuni 018 (EA), Mabberley & McCall 124 (EA), Lucas 169 (EA), Mainwaring 46 (EA).

***Swertia lugardiae* Bullock** Habit: Herb. Habitat: Montane and subalpine grassland, 2100–3500 m. Vouchers: Sileshi 4 & 5 (EA).

***Swertia tetrandra* Hochst.** Habit: Herb. Habitat: Disturbed upland grassland, 1800–2200 m. Voucher: SAJIT 005101 (EA, HIB).

***Swertia usambarensis* Engl.** Habit: Herb. Habitat: Montane grassland, 1600–3500 m. Vouchers: Mabberley & McCall 264 (EA), Thulin & Tidigs 39 (EA), Symes 623 (EA).

***Swertia welwitschii* Engl.** Habit: Herb. Habitat: Roadside, 1845–2400 m. Voucher: Jex–Blake 2122 (EA).

**F107. Loganiaceae**

1 Genus, 2 Species

***Strychnos henningsii* Gilg.** Habit: Tree. Habitat: Forest thicket on rocky hills, 850–2100 m. Vouchers: SAJIT Z0035 (HIB), FOKP 11661 (EA), Mbuni 661(EA).

***Strychnos mitis* S. Moore** Habit: Tree. Habitat: Riverine forest, 1–1950 m. Vouchers: FOKP 11464 (EA), Mbuni 200 (EA).

**F108. Apocynaceae**

20 Genera, 37 Species

***Acokanthera oppositifolia* (Lam.) Codd** Habit: Shrub. Habitat: Woodland, 1450–2100 m. Voucher: FOKP 1097 (EA, HIB).

***Acokanthera schimperi* (A. DC.) Schweinf.** Habit: Tree. Habitat: Wooded grassland, 1200–2300 m. Voucher: FOKP 11306 (EA, HIB).

- Caralluma arachnoidea* (P.R.O. Bally) M.G. Gilbert. Habit: Herb. Habitat: Rocky grassland, 100–1300 m. Voucher: Hartmann & Newton 284046 (EA).
- Caralluma dicapuae* (Chiov.) Chiov. Habit: Herb. Habitat: Rocky bushland, 700–1700 m. Voucher: FOKP 1260 (EA, HIB).
- Caralluma peckii* P.R.O. Bally Habit: Herb. Habitat: Rare in rocky bushland, 900–1150 m. Voucher: Bally 12359 (EA).
- Carissa edulis* (Forssk.) Vahl Habit: Shrub. Habitat: Bushland, thicket, grassland, 1–2550 m. Vouchers: FOKP 11681 (EA), Mbuni 681 (EA).
- Carissa spinarum* L. Habit: Shrub. Habitat: Forest edges woodland, 1–2550 m. Vouchers: FOKP 1109, 1272 & 11439 (EA, HIB), Mbuni 175 (EA).
- Ceropegia ballyana* Bullock Habit: Climber. Habitat: Dry bushland, 900–1400 m. Voucher: Masinde 683 (EA).
- Ceropegia racemosa* N.E. Br. Habit: Climber. Habitat: Evergreen forest, 1–1900 m. Voucher: FOKP 1822 (EA, HIB).
- Gomphocarpus fruticosus* subsp. *flavidus* (N.E. Br.) Goyder Habit: Shrub. Habitat: Upland grassland, 900–2900 m. Vouchers: Napier 2039 (EA), Hepper 5056 (EA).
- Gomphocarpus phillipsiae* (N.E. Br.) Goyder Habit: Shrub. Habitat: Upland grassland, 1600–3050 m. Vouchers: FOKP 11279 (EA, HIB), Mbuni 015 (EA).
- Gomphocarpus physocarpus* E. Mey. Habit: Shrub. Habitat: Upland grassland, 1800–3000m. Vouchers: SAJIT 004771 (EA, HIB), FOKP 11300 (EA, HIB), Mbuni 056 (EA, HIB).
- Gomphocarpus stenoglossus* Schltr. Habit: Herb Habitat: Grassland, rocky soils, 1600–3050 m. Voucher: FOKP 1817 (EA, HIB).
- Landolphia buchananii* (Hallier f.) Stapf Habit: Climber. Habitat: Riverine, 1350–2150 m. Vouchers: FOKP 1270 & 11273 (EA, HIB).
- Leptadenia lancifolia* (Schumach. & Thonn.) Decne. Habit: Climber. Habitat: Alluvial & Riverine bushland, 1650–2600 m. Voucher: Balley 12360 (EA).
- Margaretta rosea* Oliv. Habit: Herb. Habitat: Grasslands, 1600–2500 m. Voucher: Symes 280 (EA).
- Marsdenia robusta* Balf. f Habit: Climber. Habitat: bushland, 1600–2000 m. Voucher: FOKP 11310 (EA, HIB).
- Marsdenia angolensis* N.E. Br. Habit: Climber. Habitat: Shrubland and Riverine bushland, 1600–2000 m. Voucher: Tweedie 2403 (EA).
- Marsdenia rubicunda* N.E. Br. Habit: Climber. Habitat: Riverine, bushland in dry areas, 0–1300 m. Voucher: Goyder & Masinde 3952 (EA).
- Marsdenia schimperi* Decne. Habit: Climber. Habitat: Upland forest edge, 1800–2650 m. Vouchers: SAJIT 006886 (EA, HIB), FOKP 1884 & 10986 (EA, HIB).
- Mondia whitei* (Hook. f.) Skeels. Habit: Climber. Habitat: 1600–2000 m. Voucher: FOKP 998 (EA, HIB).
- Pachycarpus eximius* (Schltr.) Bullock. Habit: Herb. Habitat: Uncommon in grassland, 1600–2500 m. Voucher: Haper & Field 5038 (EA).
- Pachycarpus grantii* (Oliv.) Bullock Habit: Herb. Habitat: Montane grassland, 1850–2950 m. Voucher: Hepper et al. 5038 (EA).

- Pachycarpus lineolatus* (Decne.) **Bullock** Habit: Herb. Habitat: Dry wooded grassland, 1000–2700 m. Voucher: Napier 2019 (EA).
- Pachycarpus petherickianus* (Oliv.) **Goyder**. Habit: Herb. Habitat: 1000–2000 m. Voucher: Tweedie 380 (EA).
- Pentarrhinum gonoloboides* (Schltr.) **Liede** Habit: Climber. Habitat: Montane forest, 2500–3200 m. Voucher: Tweedie 3912 (EA).
- Pergularia daemia* (Forssk.) **Chiov.** Habit: Herb. Habitat: Upland forest, around 2050 m. Vouchers: FOKP 1268 & 11481 (EA, HIB), Mbuni 217 & 749 (EA).
- Periploca linearifolia* **Quart.–Dill. & A. Rich.** Habit: Climber. Habitat: Upland forest, 1900–2900 m. Vouchers: SAJIT 005059 (EA, HIB), FOKP 1076 (EA, HIB), Mbuni 044 & 622 (EA, HIB), Bridson 104 (EA), Fattan 13876 (EA).
- Saba comorensis* (Bojer ex A. DC.) **Pichon**. Habit: Shrub. Habitat: Riverine forest, 1–1800 m. Voucher: Mabberley & McCall 98 (EA).
- Secamone attenuifolia* **Goyder** Habit: Shrub. Habitat: Bushland, wooded grassland, 1000–1850 m. Voucher: Tweedie 3638 (EA).
- Stathmostelma pedunculatum* (Decne.) **K. Schum.** Habit: Herb. Habitat: Sandy grassland, 0–2300 m. Voucher: Lucas 190 (EA).
- Tabernaemontana stapfiana* **Britten** Habit: Tree. Habitat: Wet forest, 1500–2300 m. Vouchers: SAJIT 006887 (EA, HIB), FOKP 1112, 10987 (EA, HIB).
- Tylophora heterophylla* **A. Rich.** Habit: Climber. Habitat: Upper forest, 2600–3500 m. Vouchers: FOKP 11600 (EA), Mbuni 596 & 600 (EA), Mabberley & McCall 65 (EA).
- Tylophora lugardae* **Bullock** Habit: Climber. Habitat: Upland forest, 2000–2500 m. Voucher: Archer 303 (EA).
- Tylophora tenuipedunculata* **K. Schum.** Habit: Climber. Habitat: Upland forest up to 1500 m. Vouchers: FOKP 11453 (EA, HIB), Mbuni 189 (EA).
- Xysmalobium heudelotianum* **Decne.** Habit: Herb. Habitat: Dry grassland, 1500–2000 m. Voucher: Napier 1974 (EA).

## F109. Boraginaceae

6 Genus, 11 Species

- Cordia africana* **Lam.** Habit: Tree. Habitat: Riverine, forest, wooded grassland, 1050–2100 m. Voucher: SAJIT 005062 (EA, HIB).
- Cynoglossum amplifolium* **Hochst. ex A. DC.** Habit: Herb. Habitat: Montane forest, 2100–3430 m. Voucher: Irwin 423 (EA).
- Cynoglossum aequinoctiale* **T.C.E. Fr.** Habit: Herb. Habitat: Montane grassland, 1770–2480 m. Voucher: Thulin & Tidigs 77 (EA).
- Cynoglossum cheranganiense* **Verdc.** Habit: Herb. Habitat: Rare in alpine grassland, heath and upper forest zone, 2480–3255 m. Vouchers: Tweedie 2984 (EA), Mabberley 207 (EA), Lucas 168 (EA).
- Cynoglossum coeruleum* **Hochst. ex A. DC.** Habit: Herb. Habitat: Montane forest, 1100–3200 m. Voucher: FOKP 1245 & 11435 (EA, HIB), Mbuni 171 (EA), Dale 15331 (EA).



- Ebretia cymosa* Thonn.** Habit: Shrub. Habitat: Evergreen forest, dry or wet forest patches, 1050–2300 m. Vouchers: FOKP 1882 & 11625 (EA, HIB), Mbuni 625 (EA).
- Lithospermum afromontanum* Weim.** Habit: Shrub. Habitat: Montane forest edges, heath woodland, 2100–3350 m. Vouchers: Tweedie 3828 (EA), Thulin & Tidigs 239 (EA).
- Myosotis abyssinica* Boiss. & Reut.** Habit: Herb. Habitat: Montane forest edges, heath woodland, 1560–3590 m. Voucher: Thulin & Tidings 236 (EA).
- Myosotis keniensis* T.C.E. Fr.** Habit: Herb. Habitat: Alpine zones, 3150–3350 m. Voucher: Thulin & Tidigs 236 (EA).
- Trichodesma physaloides* (Fenzl) A. DC.** Habit: Herb. Habitat: Wooded grassland, 700–2400 m. Voucher: Mortimer 275 (EA).
- Trichodesma zeylanicum* (Burm. f.) R. Br.** Habit: Herb. Habitat: Dry bushland, 250–1710 m. Vouchers: FOKP 11281 (EA), Mbuni 017 (EA).

### F110. Convolvulaceae

7 Genera, 15 Species

- Astripomoea lachnosperma* (Choisy) A. Meeuse** Habit: Herb. Habitat: Bushland, 750–2600 m. Voucher: Napier 2035 (EA, HIB).
- Astripomoea malvacea* (Klotzsch) A. Meeuse.** Habit: Shrub. Habitat: Wooded grassland, 725–2240 m. Voucher: Napier 2074 (EA).
- Convolvulus kilimandschari* Engl.** Habit: Climber. Habitat: Bamboo thicket, 2400–3500 m. Voucher: FOKP 1062 (EA, HIB).
- Convolvulus wightii* Wall.** Habit: Herb. Habitat: Grassland, 1500–2500 m. Voucher: FOKP 1292 (EA, HIB).
- Cuscuta kilimanjari* Oliv.** Habit: Climber. Habitat: Common in forest areas, 1500–2770 m. Voucher: SAJIT 006901 (EA, HIB).
- Cuscuta epilinum* Weihe** Habit: Climber. Habitat: Cultivated ground, 1800–2250 m. Voucher: Schouten 58 & H348 (EA).
- Cuscuta planiflora* Ten.** Habit: Climber. Habitat: Occurring on various hosts, 1500–3000 m. Vouchers: FOKP 11553 (EA, HIB), Mbuni 290 (EA).
- Ipomoea cairica* (L.) Sweet.** Habit: Herb. Habitat: Swampy grassland, 6000–1950 m. Voucher: SAJIT Z0056 (EA).
- Ipomoea tenuirostris* Choisy** Habit: Herb. Habitat: Bushland and thicket, 1650–2710 m. Vouchers: FOKP 1885 & 11510 (EA, HIB), Mbuni 246 (EA), Tweedie 3115 (EA), Webster 8924 (EA).
- Ipomoea crepidiformis* Hallier f.** Habit: Herb. Habitat: Wooded grassland, 900–2150 m. Voucher: Champion T3 (EA).
- Ipomoea spathulata* Hallier f.** Habit: Shrub. Habitat: *Acacia–Commiphora* Bushland, 610–1640 m. Vouchers: FOKP 11440 (EA) & Mbuni 176 (EA).
- Ipomoea kituiensis* Vatke.** Habit: Herb. Habitat: Dry bushland, 180–1860 m. Vouchers: SAJIT 006850 (EA, HIB), FOKP 11510 & 10950 (EA, HIB), Mbuni 246 (EA).
- Ipomoea tenuirostris* Choisy** Habit: Herb. Habitat: Bushland and thicket, 1650–2710 m. Voucher: Tweedie 3115 (EA).



***Stictocardia beraviensis* (Vatke) Hallier f.** Habit: Shrub. Habitat: Bushland, 900–1800 m. Voucher: Honore 3451 (EA).

***Turbina stenosphon* (Hallier f.) A. Meeuse** Habit: Climber. Habitat: Bushland and in rocky areas, 900–1800 m. Voucher: Tweedie 1926 (EA).

### F111. Solanaceae

5 Genera, 18 Species

***Cestrum aurantiacum* Lindl.** Habit: Shrub. Habitat: Cultivated and disturbed ground, 1000–2500 m. Vouchers: FOKP 1020 (EA, HIB), Mbuni 085 (EA, HIB).

***Discopodium penninervium* Hochst.** Habit: Shrub. Habitat: Bamboo zone, 2900–3300 m. Voucher: FOKP 1891 (EA, HIB).

***Physalis lagascae* Roem. & Schult.** Habit: Herb. Habitat: Cultivated and disturbed ground, 40–1850 m. Voucher: Meyerhoff 12 (EA).

***Physalis peruviana* L.** Habit: Herb. Habitat: Cultivated and naturalized, 1700–2480 m. Voucher: Mabberley & McCall 108 (EA).

***Solanum aculeastrum* Dunal.** Habit: Shrub. Habitat: Forest margin, 1800–2650 m. Vouchers: FOKP 935 & 11364 (EA, HIB), Mbuni 100 (EA), Symes 635 (EA).

***Solanum aculeatissimum* Jacq.** Habit: Herb. Habitat: Montane forest, 1425–2640 m. Voucher: FOKP 11397 (EA), Mbuni 133 (EA), Hepper & Field 4985 (EA).

***Solanum anguivi* Lam.** Habit: Shrub. Habitat: Cultivated, 1230–2700 m. Vouchers: SAJIT 005143 (EA, HIB), FOKP 966 & 11535 (EA, HIB), Mbuni 271 (EA), Hepper & Field 4986 (EA).

***Solanum betaceum* Cav.** Habit: Shrub. Habitat: Cultivated, 1200–2800 m. Voucher: FOKP 1879 (EA, HIB).

***Solanum campylacanthum* Hochst.** Habit: Shrub. Habitat: Cultivated, 1030–2000 m. Vouchers: FOKP 1296 & 11480 (EA, HIB), Mbuni 216 (EA).

***Solanum giganteum* Jacq.** Habit: Shrub. Habitat: Forest margin, Undergrowth, 1500–2400 m. Vouchers: FOKP 11365 (EA, HIB) & Mbuni 100 (EA).

***Solanum hastifolium* Dunal** Habit: Shrub. Habitat: Dry bushland or grassland, 50–1400 m. Voucher: Carter & Stannard 59 (EA).

***Solanum mauense* Bitter** Habit: Shrub. Habitat: Secondary forest, 1800–2700 m. Vouchers: SAJIT 004754 & 004774 (EA, HIB), FOKP 11291 (EA, HIB), Mbuni 027 (EA).

***Solanum mauritianum* Scop.** Habit: Tree. Habitat: Cultivation, 1450–2750 m. Vouchers: FOKP 1069 & 11397 (EA, HIB), Mbuni 133 (EA).

***Solanum nakurense* C.H. Wright.** Habit: Shrub. Habitat: Upland bushland, 900–2950 m. Vouchers: FOKP 1006 & 11605 (EA, HIB), Mbuni 605 (EA), Hepper & Field 4976 (EA), Webster 8918 (EA).

***Solanum nigrum* L.** Habit: Shrub. Habitat: Cultivated, 0–3070 m. Vouchers: FOKP 11341 (EA, HIB), Mbuni 077 (EA), Webster 8918 (EA).

***Solanum sessilistellatum* Bitter.** Habit: Shrub. Habitat: Montane rain forest, 2130–2990 m. Vouchers: FOKP 11379 (EA, HIB), Mbuni 115 (EA), Jackson 2424 (EA).

***Solanum terminale* Forssk.** Habit: Shrub. Habitat: Riverine, thickets, 1350–2950 m. Vouchers: SAJIT 004736 (EA, HIB), FOKP 1888, 11297 (EA, HIB), Mbuni 033 (EA), Irwin 139 (EA).

***Withania somnifera* (L.) Dunal.** Habit: Shrub. Habitat: Forest margin, 450–2250 m. Vouchers: FOKP 11384 & 14477 (EA, HIB), Mbuni 119 & 213 (EA).

#### F112. Oleaceae

2 Genera, 5 Species

***Jasminum abyssinicum* Hochst. ex DC.** Habit: Climber. Habitat: Upland forest edges, bushland, open and riverine, 900–3000 m. Vouchers: SAJIT 005088 (EA, HIB), FOKP 11353 (EA, HIB), Webster 8823 (EA).

***Jasminum fluminense* Vell.** Habit: Climber. Habitat: Dry *Combretum*, *Albizia* woods, 280–2700 m. Vouchers: SAJIT 006807 (EA, HIB), FOKP 10907 (EA, HIB).

***Olea europaea* subsp. *africana* (Mill.) P.S. Green.** Habit: Tree. Habitat: Upland forest, 1150–2550 m. Voucher: SAJIT 004756 (EA, HIB).

***Olea europaea* subsp. *cuspidata* (Wall. & G. Don) Cif.** Habit: Tree. Habitat: Upland evergreen forest, 950–2400 m. Voucher: FOKP 1798 (EA, HIB).

***Olea africana* Mill.** Habit: Tree. Habitat: Upland forest, 1150–2550 m. Voucher: Lind 5088 (EA).

#### F113. Plantaginaceae

4 Genera, 5 Species

***Callitriche oreophila* Schotsman.** Habit: Herb. Habitat: Bamboo zone, 1900–3500 m. Voucher: Townsend 2389 (EA).

***Plantago palmata* Hook. f.** Habit: Herb. Habitat: Montane rain forest, Path sides, 1704–3550 m. Vouchers: FOKP 1065 & 11552 (EA, HIB), Mbuni 289 (EA), Pudwa 67 (EA).

***Plantago lanceolata* L.** Habit: Herb. Habitat: Path sides, 1650–2750 m. Voucher: Tweedie 2806 (EA).

***Sibthorpia europaea* L.** Habit: Herb. Habitat: Alpine zone, 1860–2345 m. Voucher: Mabberley 576 (EA).

***Veronica abyssinica* Fresen.** Habit: Herb. Habitat: Upland grassland, woodland edges, 1560–3500 m. Voucher: Symes 516 (EA).

#### F114. Scrophulariaceae

7 Genera, 7 Species

***Alectra asperrima* Benth.** Habit: Herb. Habitat: Montane wet grassland, 2000–3000 m. Voucher: Thorold 2761 (EA).

***Buddleja polystachya* Fresen.** Habit: Tree. Habitat: Montane forest, Bushland, 1000–2700 m. Vouchers: SAJIT 006895 (EA, HIB), FOKP 965, 11319, 11327 & 11393 (EA, HIB), Mbuni 055 & 128 (EA).

***Cynium tenuisectum* (Standl.) O.J. Hansen** Habit: Tree. Habitat: Bushland, 1000–2700 m. Voucher: SAJIT 007119 (EA, HIB).

***Hebenstretia dentata* L.** Habit: Shrub. Habitat: Grassland at around 2300 m. Voucher: Thulin 119 (EA).

***Limosella africana* Glück** Habit: Herb. Habitat: Upland grassland, 1600–3500 m. Voucher: Mabberley 570 (EA).

***Selago thomsonii* Rolfe.** Habit: Shrub. Habitat: Dry subalpine heathland, 1860–3380 m. Vouchers: Dale 3395 (EA), Part II Botany 5159 (EA).

***Verbascum scrophulariifolium* (Hochst.) Hub.-Mor.** Habit: Herb. Habitat: Upland grassland, 1950–2635 m. Voucher: Thulin & Tidigs 44 (EA).

### F115. Stilbaceae

3 Genera, 4 Species

***Halleria lucida* L.** Habit: Tree. Habitat: Montane forest, Drier forests associated with cedar, podo and Bamboo, 1550–2750 m. Vouchers: SAJIT 005142 & 006802 (EA, HIB), FOKP 1014, 10902 & 11354 (EA, HIB), Mbuni 619 (EA), Agnew et al. 5076 (EA).

***Hebenstretia angolensis* Rolfe.** Habit: Shrub. Habitat: Rocky heathlands, 1500–3500 m. Vouchers: Mbuni 125 (EA), Bogdan 4390 (EA).

***Nuxia congesta* R. Br. ex Fresen.** Habit: Tree. Habitat: Montane forest, bamboo Zone, 1550–2850 m. Vouchers: SAJIT 005068 (EA, HIB), FOKP 11350 & 11370 (EA, HIB).

***Nuxia oppositifolia* (Hochst.) Benth.** Habit: Tree. Habitat: Riverine forest, bushland, 1550–2850 m. Voucher: Honare 3716 (EA).

### F116. Linderniaceae

3 Genera, 7 Species

***Craterostigma plantagineum* Hochst.** Habit: Herb. Habitat: Over rocks, 1160–2300 m. Voucher: Hepper & Field 5063 (EA).

***Craterostigma pumilum* Hochst.** Habit: Herb. Habitat: Over rocks, in montane, 1800–3300 m. Voucher: Hepper & Field 5026 (EA).

***Cynium adonense* E. Mey. ex Benth.** Habit: Herb. Habitat: Wooded grassland, 0–2550 m. Vouchers: Lucas 194 (EA), Symes 32 (EA).

***Lindernia abyssinica* Engl.** Habit: Herb. Habitat: Shallow soil, 1800–2600 m. Voucher: Maas 4744 (EA).

***Lindernia pulchella* (Skan) Philcox** Habit: Herb. Habitat: Short grassland, 400–1800 m. Voucher: Tweedie 3810 (EA).

*Lindernia rotundifolia* (L.) **Alston** Habit: Herb. Habitat: Grassy marshes, 1650–1900 m. Vouchers: FOKP 1146, 1236 & 1795 (EA, HIB).

*Lindernia schweinfurthii* (Engl.) **Dandy** Habit: Herb. Habitat: Shallow soils, 1700–1850 m. Voucher: Lucas 174 (EA).

#### F117. Pedaliaceae

1 Genus, 2 Species

*Sesamum angolense* **Welw.** Habit: Shrub. Habitat: Grassland and roadside, 400–2400 m. Voucher: FOKP 1039 (EA, HIB).

*Sesamum calycinum* **Welw.** Habit: Herb. Habitat: Grassland and wasteland, 310–1340 m. Voucher: FOKP 1039 (EA, HIB).

#### F118. Lamiaceae

32 Genera, 68 Species

*Achyrospermum schimperi* (Hochst. ex Briq.) **Perkins** Habit: Shrub. Habitat: Wet streamside, 1600–3000 m. Vouchers: FOKP 11311 (EA), Mbuni 047 (EA).

*Ajuga remota* **Benth.** Habit: Herb. Habitat: Montane forest, 1500–3150 m. Vouchers: FOKP 11473 (EA, HIB), Mbuni 209 (EA).

*Aeollanthus densiflorus* **Ryding** Habit: Herb. Habitat: wooded grassland, Rocky slopes 1730–2300 m. Voucher: FOKP 1813 (EA, HIB).

*Aeollanthus repens* **Oliv.** Habit: Shrub. Habitat: Wooded grassland, 1550–2700 m. Vouchers: FOKP 1031, Thulin & Tidigs 196 (EA).

*Becium decumbens* (Gürke) **A.J. Paton** Habit: Herb. Habitat: grassland, 1550–3200 m. Voucher: Townsend 2355 (EA).

*Bridson rotundifolium* (Briq.) **A.J. Paton** Habit: Herb. Habitat: Wooded grassland, 1500–2800 m. Voucher: Bridson 102 (EA).

*Clerodendrum capense* **Eckl. & Zeyh. ex Schauer** Habit: Shrub. Habitat: Wooded grassland, 1200–1900 m. Voucher: SAJIT 005081 (EA, HIB).

*Clerodendrum johnstonii* **Oliv.** Habit: Shrub. Habitat: Wet forest margin, 1200–2500 m. Vouchers: SAJIT 004723, 005081 & 006817 (EA, HIB), FOKP 10917 & 11432 (EA, HIB), Mbuni 168 & 739 (EA, HIB), Tweedie 4201 (EA).

*Clerodendrum umbellatum* **Poir.** Habit: Herb. Habitat: Wooded grassland, up to 1860 m. Vouchers: Napier 2007 (EA), Tweedie 2732 (EA).

*Clinopodium abyssinicum* (Benth.) **Kuntze** Habit: Herb. Habitat: Woodland, 1000–3000 m. Voucher: Verdcourt 2439 (EA).

*Fuerstia africana* **T.C.E. Fr.** Habit: Herb. Habitat: Grassland, 800–2400 m. Vouchers: FOKP 11295, 11431 & 11728 (EA, HIB), Mbuni 031, 167 & 728 (EA).

*Geniosporum paludosum* **Baker.** Habit: Herb. Habitat: Grassland, 1000–2500 m. Voucher: Ivens 1253 (EA).

*Hoslundia opposita* **Vahl.** Habit: Shrub. Habitat: Bushland wooded grassland, 1–2000 m. Vouchers: FOKP 11441 (EA, HIB), Mbuni 177 (EA), Webster 8969 AE.



- Leonotis mollissima* Gürke.** Habit: Herb. Habitat: Disturbed grassland, 1500–2600 m. Voucher: SAJIT 004845 (EA, HIB).
- Leonotis nepetifolia* (L.) R. Br.** Habit: Shrub. Habitat: Disturbed grassland, 900–2300 m. Voucher: SAJIT 004845 (EA, HIB).
- Leonotis ocymifolia* var. *raineriana* (Vis.) Iwarsson.** Habit: Shrub. Habitat: Montane forest zone, 1770–3360 m. Vouchers: FOKP 942 & 11311 (EA, HIB), Part II Botany 53 (EA).
- Leucas argentea* Gürke.** Habit: Shrub. Habitat: Upland grassland, 1200–2710 m. Vouchers: Thulin & Tidigs 123 (EA), Dale 3408 (EA).
- Leucas calostachys* var. *fasciculata* (Baker) Sebal.** Habit: Herb. Habitat: Grassland, 1600–2800 m. Vouchers: FOKP 1217, 11348 & 11371 (EA, HIB), Mbuni 10 & 754 (EA).
- Leucas deflexa* Hook. f.** Habit: Herb. Habitat: Upland grassland, 1600–2600 m. Vouchers: SAJIT 006803 (EA, HIB), FOKP 10903 & 11312 (EA, HIB), Mbuni 048 (EA).
- Leucas masaiensis* Oliv.** Habit: Herb. Habitat: Upland grassland, 1280–2735 m. Voucher: Thulin & Tidigs 272 (EA).
- Leucas martinicensis* (Jacq.) R. Br.** Habit: Herb. Habitat: Disturbed soil especially on farmland, 0–2200 m. Vouchers: FOKP 11696 (EA), Mbuni 696 (EA).
- Leucas oligocephala* Hook. f.** Habit: Shrub. Habitat: Wooded grassland, 1600–2990 m. Voucher: Symes 753 (EA).
- Lippia javanica* (Burm. f.) Spreng.** Habit: Shrub. Habitat: Wooded bushland, 1300–2100 m. Vouchers: FOKP 11448 (EA, HIB), Mbuni 184 (EA).
- Mentha aquatica* L.** Habit: Herb. Habitat: Upland forest, 1950–2600 m. Voucher: Symes 213 (EA).
- Micromeria imbricata* (Forssk.) C. Chr.** Habit: Herb. Habitat: Upland dry grassland, 1580–3600 m. Vouchers: FOKP 11546 & 14499 (EA, HIB), Mbuni 235 & 283 (EA), Thulin & Tidigs 74 (EA).
- Nepeta azurea* R. Br. ex Benth.** Habit: Herb. Habitat: Bushland, 1800–3600 m. Voucher: Mabberley & McCall 248 (EA).
- Ocimum americanum* L.** Habit: Herb. Habitat: Bushland, Disturbed grassland, 0–1850 m. Vouchers: FOKP 11472 (EA, HIB), Mbuni 208 (EA).
- Ocimum decumbens* Gürke.** Habit: Shrub. Habitat: Bushland, 1950–3000 m. Voucher: Maas 4754b (EA).
- Ocimum gratissimum* L.** Habit: Shrub. Habitat: Disturbed grassland, 1100–2325 m. Voucher: Symes 156 (EA).
- Ocimum kilimandscharicum* Gürke** Habit: Shrub. Habitat: Stony, Riverine grassland, 1100–2350 m. Voucher: SAJIT 004746 (EA, HIB).
- Ocimum lamiifolium* Hochst. ex Benth.** Habit: Shrub. Habitat: Montane forest, 1550–2340 m. Vouchers: FOKP 11350, 11355 & 11633 (EA, HIB), Mbuni 086 & 633 (EA, HIB), Webster 8975 (EA).
- Orthosiphon rubicundus* (D. Don) Benth.** Habit: Herb. Habitat: Wooded grassland, 1600–2635 m. Voucher: Symes 73 (EA, HIB).

- Orthosiphon schimperi* Benth. Habit: Herb. Habitat: Wooded grassland, 1600–2635 m. Voucher: Napier 1935 (EA).
- Platostoma rotundifolium* (Briq.) A.J. Paton. Habit: Herb. Habitat: Swampy grassland, 1500–2800 m. Vouchers: SAJIT Z0021 (EA, HIB), FOKP 1222 (EA, HIB).
- Plectranthus agnewii* Lukhoba & A.J. Paton. Habit: Herb. Habitat: Rocky grassland, 1700–1900 m. Voucher: Thomas 3396 (EA).
- Plectranthus amboinicus* (Lour.) Spreng. Habit: Shrub. Habitat: Rocky, bushland, 130–1870 m. Voucher: Tweedie 4264 (EA).
- Plectranthus autranii* (Briq.) Erhardt, Götz & Seybold Habit: Shrub. Habitat: Wet forest, streamside, 1500–3000 m. Voucher: Thulin & Tidigs 176 (EA).
- Plectranthus barbatus* Andrews. Habit: Shrub. Habitat: Bushland, rocky grassland, 880–2950 m. Vouchers: FOKP 967, 1037, 1883, 11360, 11368, & 11425 (EA, HIB), Mbuni 160 (EA), Tweedie 4263 (EA), Symes 655 (EA).
- Plectranthus bojeri* (Benth.) Hedge Habit: Herb. Habitat: Grassland, 1200–2670 m. Voucher: Pole et al. 1514 (EA).
- Plectranthus caninus* Roth. Habit: Herb. Habitat: Disturbed dry rocky area, 1100–2500 m. Vouchers: SAJIT 004820 (EA, HIB), FOKP 11343 (EA, HIB).
- Plectranthus defolius* Hochst. ex Benth. Habit: Herb. Habitat: Open grassland, 2000–2880 m. Voucher: Tweedie 3728 (EA).
- Plectranthus dupuisii* (Briq.) A.J. Paton Habit: Shrub. Habitat: Grazed grassland, 2032–3000 m. Vouchers: SAJIT Z008, Symes 752.
- Plectranthus edulis* Agnew. Habit: Shrub. Habitat: Grassland, 2032–3000 m. Voucher: FOKP 994 (EA, HIB).
- Plectranthus grandicalyx* (E.A. Bruce) J.K. Morton. Habit: Shrub. Habitat: Grassland, 2000–3000 m. Voucher: Rauh 652 (EA).
- Plectranthus kamerunensis* Gürke Habit: Shrub. Habitat: Montane forest zone, 1500–2950 m. Vouchers: FOKP 11365 (EA, HIB), Mbuni 413 (EA).
- Plectranthus lactiflorus* (Vatke) Angew Habit: Shrub. Habitat: Wooded grassland, 1100–2500 m. Voucher: Webster 8980 (EA).
- Plectranthus longipes* Baker Habit: Herb. Habitat: Woodland, 700–2440 m. Voucher: SAJIT Z0046 (EA, HIB).
- Plectranthus ornatus* Codd. Habit: Herb. Habitat: *Acacia*, *Commiphora* bushland, 1000–2790 m. Voucher: Gillett 18495 (EA).
- Plectranthus punctatus* (L. f.) L'Hér. Habit: Herb. Habitat: Disturbed montane, bamboo forest, 1950–3350 m. Vouchers: FOKP 1132 (EA, HIB), Mbuni 090 (EA), Thulin & Tidigs 51 (EA).
- Plectranthus tetradenifolius* A.J. Paton Habit: Herb. Habitat: Rocky places, 950–2325 m. Voucher: Mathew 6170 (EA).
- Plectranthus xylopodus* Lukhoba & A.J. Paton Habit: Herb. Habitat: Dry grassland, bushland, 100–1400 m. Vouchers: SAJIT 004837 (EA, HIB), Cymes 293 (EA).
- Pycnostachys eminii* Gürke Habit: Shrub. Habitat: Riverine and forest margin, 1600–1800 m. Vouchers: FOKP 11734 (EA), Mbuni 734 (EA).

- Pycnostachys meyeri* Gürke ex Engl.** Habit: Herb. Habitat: Bamboo zone, secondary bushland, 1900–3000 m. Vouchers: FOKP 11274, 11301 & 11346 (EA, HIB), Mbuni 010 (EA).
- Pycnostachys stuhlmannii* Gürke.** Habit: Herb. Habitat: Marshes, 1860–2400 m. Voucher: Symes 202 (EA).
- Rotheca myricoides* (Hochst.) Steane & Mabb.** Habit: Shrub. Habitat: Bushland, 1180–2120 m. Vouchers: FOKP 11566 & 11691 (EA), Mbuni 303, 691 (EA).
- Salvia merjamie* Forssk.** Habit: Herb. Habitat: Grassland, 1800–3500 m. Voucher: Lucas 167 (EA).
- Salvia nilotica* Juss. ex Jacq.** Habit: Herb. Habitat: Grassland, 1800–3500 m. Vouchers: FOKP 11534 & 11704 (EA, HIB), Mbuni 270 & 704 (EA), Symes 75 (EA).
- Scutellaria paucifolia* Baker** Habit: Herb. Habitat: Short grassland, 1550–2200 m. Voucher: Webster 8978 (EA).
- Scutellaria schweinfurthii* Briq.** Habit: Herb. Habitat: Short grassland, 1550–1950 m. Voucher: Symes 33 (EA).
- Scutellaria violascens* Gürke** Habit: Herb. Habitat: wooded grassland, 1920–2480 m. Vouchers: SAJIT 005107 (EA, HIB), Chater 1932 (EA).
- Satureja abyssinica* (Benth.) Briq.** Habit: Herb. Habitat: Wooded grassland, 1920–2500 m. Vouchers: FOKP 1085, Bridson 101 (EA).
- Micromeria biflora* (Buch.-Ham. ex D. Don) Benth.** Habit: Shrub. Habitat: Grassland, 1580–3300 m. Voucher: FOKP 1223 (EA, HIB).
- Satureja imbricata* (Forssk.) Briq.** Habit: Shrub. Habitat: Dry grassland, 1580–3500 m. Voucher: Part II Botany 79 (EA).
- Satureja pseudosimensis* Brenan.** Habit: Shrub. Habitat: Grassland, 1400–2900 m. Voucher: Symes 622 (EA).
- Stachys alpigena* T.C.E. Fr.** Habit: Herb. Habitat: Alpine zone, 2940–3550 m. Vouchers: FOKP 11325 (EA, HIB), Mbuni 061 (EA).
- Tetradenia riparia* (Hochst.) Codd.** Habit: Shrub. Habitat: Rocky slopes, 600–2200 m. Voucher: SAJIT 004839 (EA, HIB).
- Tinnea aethiopica* Kotschy ex Hook. f.** Habit: Shrub. Habitat: Forest thicket, forest margin, Upland woodland up to 2200 m. Vouchers: FOKP 11692, Mbuni 692 (EA), Lucas 160 (EA).
- Rotheca myricoides* (Hochst.) Steane & Mabb.** Habit: Shrub. Habitat: Grazed bushland, 1180–2120 m. Vouchers: FOKP 11566 (EA, HIB), Mbuni 303 (EA).

### F119. Orobanchaceae

9 Genera, 14 Species

- Alectra parasitica* A. Rich.** Habit: Parasitic herb. Habitat: Dry areas, 434–1670 m. Voucher: Mabberley & McCall 276 (EA).
- Alectra sessiliflora* (Vahl) Kuntze.** Habit: Parasitic herb. Habitat: Dry areas, 500–2000 m. Voucher: Bogdan 5302 (EA).
- Bartsia longiflora* Hochst. ex Benth.** Habit: Shrub. Habitat: Heath vegetation, 2450–3480 m. Voucher: Mabberley 299 (EA).

- Bartsia trixago* L.** Habit: Herb. Habitat: Heath vegetation, 900–3100 m. Vouchers: Symes 645 (EA), Tweedie 4201 (EA), Mabberley 589 (EA).
- Buchnera nuttii* Skan.** Habit: Parasitic herb. Habitat: Wooded grassland, 1300–2170 m. Vouchers: Gardener 3723 (EA), Webster 8979 (EA).
- Buchnera scabridula* E.A. Bruce** Habit: Herb. Habitat: Grassland, 2640–2940 m. Vouchers: Mabberley & McCall 303 (EA), Irwin 370 (EA).
- Buttonia natalensis* McKen ex Benth** Habit: Climber. Habitat: Dry bushland, 1800–1860 m. Voucher: SAJIT 005142 (EA, HIB).
- Cynium tenuisectum* (Standl.) O.J. Hansen** Habit: Herb. Habitat: Upland grassy marshes, 1800–3200 m. Vouchers: SAJIT 005103 (EA, HIB), Thulin & Tidigs 129 (EA), Lucas 213 (EA).
- Hedbergia abyssinica* (Benth.) Molau** Habit: Herb. Habitat: Upland grassland around, 2700 m. Voucher: Thulin & Tidigs 157 (EA).
- Orobanche ramosa* L.** Habit: Herb. Habitat: Upland grassland, 1735–2250 m. Voucher: SAJIT 004782 (EA, HIB).
- Orobanche minor* Sm.** Habit: Herb. Habitat: Upland grassland, 800–2480 m. Vouchers: SAJIT 006900 (EA, HIB), Thulin & Tidigs 177 (EA).
- Sopubia karaguensis* var. *welwitschii* (Engl.) O.J. Hansen** Habit: Herb. Habitat: Montane grassland, 500–3400 m. Voucher: Tweedie 2980 (EA).
- Sopubia ramosa* (Hochst.) Hochst.** Habit: Herb. Habitat: Wooded grassland, 1600–2170m. Vouchers: Graham 324 (EA), Agnew et al. 10581 (EA), Gardner 3724 (EA).
- Striga asiatica* (L.) Kuntze** Habit: Parasitic herb. Habitat: Upland grassland, 0–2480 m. Voucher: Mabberley 86 (EA).

## 120. Lentibulariaceae

2 Genera, 4 Species

- Genlisea hispidula* Stapf** Habit: Herb. Habitat: Grassland pools, 1860–2400 m. Voucher: Thulin & Tidings 182 (EA).
- Utricularia arenaria* A. DC.** Habit: Herb. Habitat: Seasonal swamps, 380–2950 m. Voucher: FOKP 1140 (EA, HIB).
- Utricularia livida* E. Mey.** Habit: Herb. Habitat: Seasonal pools, 2325–2730 m. Vouchers: SAJIT 006914, FOKP 1140 & 11014 (EA, HIB).
- Utricularia prehensilis* E. Mey.** Habit: Herb. Habitat: Upland marshes, 1860–2400 m. Voucher: Thulin & Tidings 181 (EA).

## F121. Acanthaceae

17 Genera, 35 Species

- Acanthus eminens* C.B. Clarke** Habit: Shrub. Habitat: Dry forest, amongst bamboo, 1500–2800 m. Vouchers: FOKP 1002 (EA, HIB), Part II Botany Class 11 (EA).
- Asystasia mysorensis* (Roth) T. Anderson** Habit: Herb. Habitat: Bushland, 1160–2100 m. Voucher: SAJIT 005148 (EA, HIB).



- Barleria grandicalyx* Lindau** Habit: Herb. Habitat: Savannah, Wooded grassland, 1100–2500 m. Vouchers: Napier 1949 (EA), Symes 35 (EA).
- Blepharis edulis* (Forssk.) Pers.** Habit: Herb. Habitat: Grassland, 140–2015 m. Voucher: SAJIT Z0066 (HIB).
- Blepharis maderaspatensis* (L.) B. Heyne ex Roth** Habit: Herb. Habitat: Grassland, bushland, 1000–3300 m. Voucher: SAJIT Z0044 (HIB).
- Crossandra massaica* Mildbr.** Habit: Herb. Habitat: Bushland, 1200–2700 m. Vouchers: FOKP 11455 & 11663 (EA), Mbuni 191 & 663 (EA).
- Crossandra nilotica* Oliv.** Habit: Herb. Habitat: Bushland, 1200–1500 m. Voucher: Mabberley 793 (EA).
- Dyschoriste thunbergiiflora* (S. Moore) Lindau** Habit: Shrub. Habitat: *Acacia*, *Commiphora* bush, 600–1450 m. Vouchers: SAJIT Z0040 (EA, HIB), Mabberley & McCall 265 (EA).
- Dicliptera laxata* C.B. Clarke** Habit: Herb. Habitat: Forest undergrowth, 1300–2800 m. Voucher: Part II Botany 31 (EA).
- Dicliptera latibracteata* I. Darbysh.** Habit: Herb. Habitat: Forest undergrowth, grassland, 2200–2900 m. Voucher: Hepper 5033 (EA).
- Dicliptera maculata* Nees** Habit: Climber. Habitat: Grassland, 1700–2800 m. Voucher: FOKP 11398 (EA, HIB).
- Hypoestes triflora* (Forssk.) Roem. & Schult.** Habit: Herb. Habitat: Grassland, bushland, 1600–3300 m. Vouchers: FOKP 1153 & 11305 (EA, HIB), Mbuni 041 (EA), Lind 2828 (EA).
- Hypoestes forskaolii* subsp. *hildebrandtii* (Lindau) I. Darbysh.** Habit: Herb. Habitat: Dry grassland, bushland forest, 0–2820 m. Vouchers: FOKP 932, 11296 & 11626, (EA, HIB), Mbuni 032 & 626 (EA, HIB).
- Hygrophila auriculata* (Schumach.) Heine** Habit: Herb. Habitat: Grassland, about 2000 m. Voucher: Ivens 1285 (EA).
- Hygrophila schulli* M.R. Almeida & S.M. Almeida** Habit: Herb. Habitat: Bushland, up to 2170 m. Voucher: Ivens 1285 (EA).
- Isoglossa gregoryi* (S. Moore) Lindau** Habit: Herb. Habitat: Montane and bamboo forest, 1900–2820 m. Voucher: FOKP 1745 (EA, HIB).
- Isoglossa substrobilina* C.B. Clarke** Habit: Herb. Habitat: Montane rain forest, 1600–2200 m. Vouchers: FOKP 948 1120 & 1747 (EA, HIB).
- Justicia anagalloides* (Nees) T. Anderson** Habit: Herb. Habitat: Grassland, 1020–2500 m. Vouchers: Geesteranus 4785 (EA), Symes 39 (EA).
- Justicia betonica* L.** Habit: Herb. Habitat: Grassland, Wet forests, riversides, 700–2220 m. Voucher: Tweedie 2958 (EA).
- Justicia calyculata* Deflers** Habit: Herb. Habitat: Bushland, 1000–2200 m. Voucher: SAJIT Z0043 (HIB).
- Justicia exigua* S. Moore.** Habit: Herb. Habitat: Grassland, 1000–2200 m. Voucher: Symes 272 (EA).
- Justicia diclipteroides* Lindau** Habit: Herb. Habitat: Woodland 1600–2325 m. Vouchers: FOKP 1088 & 11555 (EA, HIB), Mbuni 292 & 744 (EA), Geesteranus 4793 (EA).

- Justicia flava* (Forssk.) Vahl Habit: Herb. Habitat: Wooded grassland, 1400–2300 m., Vouchers: SAJIT 004725 (EA, HIB), Geesteranus 6375 (EA).
- Justicia leikpiensis* S. Moore Habit: Herb. Habitat: Grassland, 2130–2480 m. Vouchers: Napier 1914 (EA), Mainwaring 18 (EA).
- Justicia pinguior* C.B. Clarke Habit: Herb. Habitat: Wooded grassland, 1720–2170 m. Voucher: Symes 40 (EA).
- Justicia unyorensis* S. Moore. Habit: Herb. Habitat: Montane rain forest, 2170–3100 m. Voucher: Trelawny 4389 (EA).
- Justicia uncinulata* Oliv. ex C.B. Clarke Habit: Herb. Habitat: Wooded grassland, 1700–2200 m. Voucher: Symes 39 (EA).
- Lepidagathis collina* (Endl.) Milne-Redh. Habit: Herb. Habitat: Bushland, 1800–2170 m. Voucher: Heliz et al. 853 (EA).
- Megalochlamys kenyensis* Vollesen Habit: Shrub. Habitat: Wooded grassland, bushland, 1050–1450 m. Voucher: Tweedie 4265 (EA).
- Megalochlamys violacea* (Vahl) Vollesen. Habit: Shrub. Habitat: *Acacia* bushland, 150–1420 m. Voucher: Tweedie 4265 (EA).
- Mimulopsis solmsii* Schweinf. Habit: Herb. Habitat: Bushland, 1700–2300 m. Vouchers: SAJIT Z0009 (EA, HIB), FOKP 1073 & 1202 (EA, HIB), Tweedie 3229 (EA).
- Schaueria paniculata* Nees Habit: Herb. Habitat: Bushland, 1800–2170 m. Vouchers: FOKP 11484 (EA), Mbuni 220 (EA).
- Thunbergia alata* Bojer ex Sims Habit: Herb. Habitat: Grassland, bushland, 100–3000 m. Voucher: FOKP 11275 & 11568 (EA, HIB), Mbuni 305 & 662 (EA), Tweedie 2703 (EA).
- Thunbergia paulitschkeana* Beck Habit: Herb. Habitat: Grassland, 1200–3000 m. Voucher: Hepper 5024 (EA).

## F122. Bignoniaceae

1 Genus, 1 Species

- Stereospermum kunthianum* Cham. Habit: Tree. Habitat: Rocky bushland, wooded grassland, 900–2100m. Voucher: Bogdan 265 (EA).

## F123. Verbenaceae

4 Genera, 10 Species

- Hebenstreitia rariflora* A. Terracc. Habit: Herb. Habitat: Heathland to 3550 m. Vouchers: FOKP 11390 (EA, HIB), Mbuni 125 (EA).
- Lantana trifolia* L. Habit: Shrub. Habitat: Bushland, 900–2350 m. Vouchers: FOKP 1036, 1287, 11322, 11685 & 11742 (EA, HIB), Mbuni 058, 685 & 742 (EA), Lind 5095 (EA).
- Lippia grandifolia* Hochst. ex A. Rich. Habit: Shrub. Habitat: Wooded grassland, 750–2250 m. Voucher: Lind 5096 (EA).

***Lippia javanica* (Burm. f.) Spreng.** Habit: Shrub. Habitat: Wooded grassland, bushland, 1050–2300 m. Vouchers: FOKP 1886 & 11684 (EA, HIB), Mbuni 684 (EA).

***Lippia kituiensis* Vatke** Habit: Shrub. Habitat: Bushland, 450–2560 m. Voucher: Tweedie 3736 (EA).

***Lippia rehmannii* H. Pearson** Habit: Shrub. Habitat: Grassland, Bushland, 750–2250 m. Voucher: Symes 29 (EA).

***Lippia woodii* Moldenke** Habit: Herb. Habitat: Burnt grassland, 1550–2170 m. Voucher: Napier 1928 (EA).

***Verbena aristigera* S. Moore** Habit: Herb. Habitat: Open forest, 1650–2110 m. Voucher: SAJIT 004738 (EA, HIB).

***Verbena bonariensis* L.** Habit: Herb. Habitat: Bushland, Disturbed areas, 1800–2650 m. Vouchers: FOKP 1282 & 11557 (EA, HIB), Mbuni 294 (EA).

***Verbena rigida* Spreng.** Habit: Herb. Habitat: Roadside verge, 1660–2100 m. Voucher: Dyson 568 (EA).

#### F124. Aquifoliaceae

1 Genus, 1 Species

***Ilex mitis* (L.) Radlk.** Habit: Tree. Habitat: Upland riverine forest, 1450–3150 m. Vouchers: SAJIT 006912 (EA, HIB), FOKP 1013, 1227, 11374 & 11549 (EA, HIB), Mbuni 110, 286 (EA).

#### F125. Campanulaceae

4 Genera, 15 Species

***Canarina eminii* Asch. & Schweinf.** Habit: Epiphyte. Habitat: Wet forest, 2100–2650 m. Voucher: Thulin & Tidigs 59 (EA).

***Lobelia aberdarica* R.E. Fr. & T.C.E. Fr.** Habit: Shrub. Habitat: Moorland, Swamps, 1860–3350 m. Vouchers: Thulin & Tidigs 105 (EA), Townsend 2387 (EA).

***Lobelia cheranganiensis* Thulin** Habit: Herb. Habitat: Upland Forest & Moorland, 2750–3300 m. Vouchers: SAJIT 006863 (EA, HIB), FOKP 10963 (EA, HIB), Tweedie 3883 (EA), Knox 3379 (EA), Thulin & Tidigs 220 (EA).

***Lobelia deckenii* (Asch.) Hemsl.** Habit: Shrub. Habitat: Moorland up to 3550 m. Voucher: Mabberley & McCall 186 (EA).

***Lobelia duriprati* T.C.E. Fr.** Habit: Herb. Habitat: Wet montane, 1700–3550 m. Voucher: Thulin & Tidigs 220 (EA).

***Lobelia giberroa* Hemsl.** Habit: Shrub. Habitat: Forest margin, 1200–3000 m. Vouchers: FOKP 962, 1232 & 11539 (EA, HIB), Mbuni 275 (EA), Verdcourt 2437 (EA), Knox 3790 & 3852 (EA).

***Lobelia holstii* Engl.** Habit: Herb. Habitat: Grassland 1800–3520 m. Vouchers: SAJIT 004798, Newbould 2440 (EA).

***Lobelia minutula* Engl.** Habit: Herb. Habitat: Disturbed alpine, 1700–3500 m. Voucher: Thulin & Tidigs 198 (EA).

- Monopsis stellarioides* (C. Presl) Urb.** Habit: Herb. Habitat: Grassland, 1650–3500 m. Vouchers: FOKP 11532 & 11540 (EA, HIB), Mbuni 276 (EA), Mabberley & McCall 97 (EA).
- Monopsis zeyheri* (Sond.) Thulin** Habit: Herb. Habitat: Wet grassland about 1600 m. Voucher: SAJIT 005137 (EA, HIB).
- Wahlenbergia capillacea* (L. f.) A. DC.** Habit: Herb. Habitat: Bamboo zone, Rocky soils, 2300m–2950 m. Vouchers: Bogdan 4987 (EA), Symes 620 (EA).
- Wahlenbergia krebsii* Cham.** Habit: Herb. Habitat: Grassland. Lower alpine, Heath zones, 2130–3600 m. Voucher: Napier 1992 (EA).
- Wahlenbergia krebsii* subsp. *arguta* (Hook. f.) Thulin.** Habit: Herb. Habitat: Grassland, in lower alpine and heath zone, 2100–3550 m. Voucher: Thulin & Tidigs 70 (EA).
- Wahlenbergia scottii* Thulin** Habit: Herb. Habitat: Wooded grassland, 2300–2700 m. Vouchers: Thulin & Tidigs 131 (EA), Verdcourt 2427 (EA).
- Wahlenbergia silenoides* Hochst. ex A. Rich.** Habit: Herb. Habitat: Montane grassland, 1500–2100 m. Voucher: Tweedie 3020 (EA).

## F126. Asteraceae

66 Genera, 165 Species

- Acanthospermum glabratum* (DC.) Wild** Habit: Herb. Habitat: Grassland, 1300–2500 m. Voucher: SAJIT Z0007 (EA).
- Acmella caulirhiza* Delile** Habit: Herb. Herb. Habitat: Grassland, 600–2600 m. Vouchers: FOKP 1230 & 11427 (EA) Mbuni 163 (EA).
- Ageratina adenophora* (Spreng.) R.M. King & H. Rob.** Habit: Shrub. Habitat: Swampy sites, riverine, 1960–2300 m. Vouchers: SAJIT 005063 & 006809 (EA, HIB), FORK 1806 & 10909 (EA, HIB).
- Ageratum conyzoides* (L.) L.** Habit: Herb. Habitat: Disturbed ground, 30–2500 m. Voucher: FOKP 11495 (EA), Mbuni 231 (EA).
- Anthemis tigrensii* J. Gay ex A. Rich.** Habit: Herb. Habitat: Moorland zone, 2500–3500 m. Vouchers: Mabberley 214, Thulin 203 (EA).
- Artemisia afra* Jacq. ex Willd.** Habit: Shrub. Habitat: Dry shrubby montane grassland, 2000–3550 m. Vouchers: SAJIT 005114 (EA, HIB), Mbuni 725 (EA, HIB), Mabberley & McCall 241 (EA), Thulin 252 (EA).
- Aspilia kotschyi* (Sch. Bip. ex Hochst.) Oliv.** Habit: Herb. Habitat: Grassland, waste land, 10–1900 m. Voucher: Carter & Stanard 52 (EA).
- Aspilia pluriseta* Schweinf. ex Schweinf.** Habit: Herb. Habitat: Bushed grassland, 1050–2400 m. Vouchers: FOKP 11492 (EA), Mbuni 228 (EA), Symes 98 (EA).
- Athrixia rosmarinifolia* (Sch. Bip. ex Walp.) Oliv. & Hiern.** Habit: Herb. Habitat: Highland shrubland, 2600–3400 m. Vouchers: SAJIT 005119 (EA, HIB), Tweedie 3904 (EA).
- Baccharoides dumicola* (S. Moore) “Isawumi, El-Ghazaly & B. Nord.”** Habit: Herb. Habitat: Woodland, grassland edge, 1200–2300 m. Voucher: Webster 8898 (EA).



- Baccharoides adoensis* (Sch. Bip. ex Walp.) H. Rob.** Habit: Shrub. Habitat: Bushland, 125–2100 m. Voucher: FOKP 11386 (EA, HIB).
- Berkheya spekeana* Oliv.** Habit: Herb. Habitat: Wooded grassland, 1800–3100 m. Vouchers: SAJIT 005124 (EA, HIB), FOKP 1905 (EA, HIB), Symes 157 (EA).
- Bidens buchneri* (Klatt) Sherff** Habit: Herb. Habitat: Wooded grassland, 1450–1500 m. Vouchers: Napier 1924 (EA), Agnew et al. 312 (EA).
- Bidens elgonensis* (Sherff) Agnew** Habit: Herb. Habitat: Erica bushland, heath zone, 1900–3550 m. Vouchers: FOKP 11280 (EA, HIB), Mbuni 016 (EA), Tweedie 338 (EA).
- Bidens flagellata* (Sherff) Mesfin** Habit: Herb. Habitat: Grassland, 1600–3300 m. Voucher: Thulin & Tidigs 264 (EA).
- Bidens kilimandscharica* (O. Hoffm.) Sherff** Habit: Shrub. Habitat: Upland forest edges, 1500–2800 m. Vouchers: FOKP 11569 (EA, HIB), Mbuni 306 (EA), Tweedie 4214 (EA).
- Bidens lineariloba* Oliv.** Habit: Herb. Habitat: Bushland, wooded land, 500–1800 m. Voucher: Tweedie 369 (EA).
- Bidens pilosa* L.** Habit: Herb. Habitat: Highland areas, 400–2500 m. Vouchers: FOKP 11434 (EA), Mbuni 170 (EA).
- Blumea axillaris* (Lam.) DC.** Habit: Herb. Habitat: Disturbed areas, 1500–2700 m. Voucher: FOKP 11366 (EA), Mbuni 102 (EA).
- Bothriocline fusca* (S. Moore) M.G. Gilbert** Habit: Shrub. Habitat: Upper forest zones, 2000–3550 m. Voucher: FOKP 11377 (EA, HIB).
- Bothriocline longipes* (Oliv. & Hiern) N.E. Br.** Habit: Shrub. Habitat: Forest margin, 1500–2800 m. Vouchers: FOKP 11519 (EA, HIB), Mbuni 255 (EA).
- Bothriocline monticola* (M. Taylor) Wech.** Habit: Shrub. Habitat: Forest margin, about 2800 m. Voucher: Tweedie 4200 (EA).
- Bothriocline trifoliata* (De Wild. & Muschl.) Wild & G.V. Pope** Habit: Shrub. Habitat: Montane rain forest, 1950–2500 m. Voucher: Thulin & Tidigs 209 (EA).
- Carduus chamaecephalus* (Vatke) Oliv. & Hiern** Habit: Herb. Habitat: Grassland, alpine, subalpine, 2400–3550 m. Voucher: Gillett 18422 (EA).
- Carduus keniensis* R.E. Fr.** Habit: Herb. Habitat: Grassland, 2950–3550 m. Vouchers: Mbuni 098 (EA), Mabberley & McCall 212 (EA).
- Carduus nyassanus* (S. Moore) R.E. Fr.** Habit: Herb. Habitat: Montane forest, 2700–3550 m. SAJIT 004773 (EA, HIB), Vouchers: FOKP 11363 (EA, HIB), Mbuni 099 (EA), Symes 402 (EA).
- Carduus schimperi* Sch. Bip.** Habit: Herb. Habitat: Grassland & Moorland, 2550–3550 m. Voucher: Gillett 18422 (EA).
- Centaurea praecox* Oliv. & Hiern** Habit: Herb. Habitat: Wooded grassland, 1600–2300 m. Vouchers: Symes 523 (EA), Tweedie 1519 (EA), Thairu 143 (EA), Webster 8856 (EA).
- Cineraria grandiflora* Vatke** Habit: Herb. Habitat: Wooded grassland, 1800–3500 m. Voucher: Thulin 72 (EA).

- Cineraria deltoidea* Sond.** Habit: Herb. Habitat: Roadsides, forest edges cliffs, 1890–3550 m. Vouchers: FOKP 1131 & 11339 (EA, HIB), Mbuni 075 (EA), Thulin & Mhoro 72 (EA).
- Cirsium vulgare* (Savi) Ten.** Habit: Herb. Habitat: Arable land, 1790–2400 m. Vouchers: FOKP 1369 & 11362 (EA, HIB), Mbuni 098 & 105 (EA).
- Conyza aegyptiaca* (L.) Dryand. ex Aiton** Habit: Herb. Habitat: Disturbed places, 300–2000 m. Voucher: Symes 64 (EA).
- Conyza agnewii* Mesfin** Habit: Herb. Habitat: Wooded grassland around 1850 m. Voucher: Napier 1931 (EA).
- Conyza newii* Oliv. & Hiern.** Habit: Shrub. Habitat: Montane forest, 1600–2500 m. Vouchers: FOKP 11321 (EA, HIB) Mbuni, 057 (EA).
- Conyza pyrrhopappa* Sch. Bip. ex A. Rich.** Habit: Shrub. Habitat: Upland bushland, 1500–2200 m. Vouchers: SAJIT 006854 (EA, HIB), FOKP 11442 (EA, HIB), Mbuni 178 (EA).
- Conyza steudelii* Sch. Bip. ex A. Rich.** Habit: Herb. Habitat: Medium altitude, 1500–3500 m. Vouchers: FOKP 11346 (EA, HIB), Mbuni 082 (EA).
- Conyza subscaposa* O. Hoffm.** Habit: Herb. Habitat: Alpine and subalpine grassland, 3000–3500 m. Voucher: Symes 618 (EA).
- Conyza vernonioides* (Sch. Bip. ex A. Rich.) Wild** Habit: Shrub. Habitat: Moorland and bamboo, 3000–3550 m. Voucher: Tweedie 3901 (EA).
- Cotula abyssinica* Sch. Bip. ex A. Rich.** Habit: Herb. Habitat: Alpine, upland grassland, 2700–3500 m. Vouchers: Bogdan 496 (EA), Symes 643 (EA), and Mabberley 216 (EA).
- Crassocephalum bojeri* (DC.) Robyns** Habit: Herb. Habitat: Montane forest, 1500–3200 m. Voucher: Thulin 159 (EA).
- Crassocephalum montuosum* (S. Moore) Milne-Redh.** Habit: Herb. Habitat: Montane forest, 1500–3260 m. Vouchers: FOKP 1724 (EA, HIB), Chetham 1 (EA), Thulin & Tidigs 266 (EA).
- Crassocephalum* × *picridifolium* (DC.) S. Moore** Habit: Herb. Habitat: Swamps and river edges, 1300–2500 m. Vouchers: SAJIT 004806 (EA, HIB), FOKP 11503 (EA, HIB), Mbuni 239 (EA), Symes 269 (EA).
- Crassocephalum rubens* var. *sarcobasis* (Bojer ex DC.) C. Jeffrey & Beentje** Habit: Herb. Habitat: Disturbed, cultivated, higher altitude, 1500–2800 m. Vouchers: Verdcourt 746 (EA), Thulin 188 (EA), Symes 205 (EA).
- Crassocephalum vitellinum* (Benth.) S. Moore** Habit: Herb. Habitat: Upland forest and woodland, 1500–2800 m. Vouchers: FOKP 981 (EA, HIB), Thulin 158 (EA).
- Crepis rueppellii* Sch. Bip.** Habit: Herb. Habitat: Highland grassland, 1600–3200 m. Vouchers: FOKP 1221 (EA, HIB), Townsend 2368 (EA).
- Dendrosenecio cheranganiensis* (Cotton & Blakelock) E.B. Knox** Habit: Shrub. Habitat: Upper Afromontane evergreen, 3000–3550 m. Vouchers: Dale 3392 (EA), Mabberley 30 (EA).

***Dendrosenecio cheranganiensis* subsp. *cheranganiensis* (Cottton & Blakeclock)**

**E.B. Knox** Habit: Shrub. Habitat: Upper Afromontane evergreen, 3000–3550 m. Vouchers: Merbbery 512 (EA), Knox 719 (EA), Beentje 3058 (EA).

***Dendrosenecio cheranganiensis* subsp. *dalei* (Cotton & Blakelock) E.B. Knox**

Habit: Shrub. Habitat: Upper Afromontane zone, 3000–3550 m. Voucher: Maberley & McCall 209 (EA).

***Dichrocephala integrifolia* (L. f.) Kuntze** Habit: Herb. Habitat: Disturbed wet habitat, 1700–3550 m. Vouchers: FOKP 111406 (EA, HIB), Mbuni 142 (EA, HIB).***Dicoma tomentosa* Cass.** Habit: Herb. Habitat: Dry bushland, 480–1500 m. Voucher: Carter & Stanard 13 (EA).***Emilia abyssinica* (Sch. Bip. ex A. Rich.) C. Jeffrey** Habit: Herb. Habitat: Cultivated land, 800–1900 m. Voucher: Tweedie 1922 (EA).***Emilia coccinea* (Sims) G. Don** Habit: Herb. Habitat: Roadside, wasteland, 0–2000 m. Voucher: Carter & Stannard 15 (EA).***Emilia debilis* S. Moore** Habit: Herb. Habitat: Disturbed marshes, 1600–2200 m. Voucher: Symes 751 (EA)***Echinops aberdaricus* R.E. Fr.** Habit: Herb. Habitat: Subalpine grassland, 2900–3300 m. Voucher: Thulin 143 (EA).***Echinops angustilobus* S. Moore** Habit: Herb. Habitat: Higher altitudes, grassland, 2000–2800 m. Vouchers: FOKP 1139 (EA, HIB), Bogdan 5008 (EA), Townsend 2376 (EA).***Echinops amplexicaulis* Oliv.** Habit: Herb. Habitat: Wooded grassland, 1300–2700 m. Voucher: Thairu 1, Napper 1501 (EA).***Echinops hispidus* Fresen.** Habit: Herb. Habitat: Upland grassland, 1500–2200 m. Voucher: Symes 403 (EA).***Echinops hoebnelii* Schweinf.** Habit: Herb. Habitat: High altitude woodland & heartland, 2200–3500 m. Vouchers: FOKP 11381 (EA), Mbuni 116 & 118 (EA).***Echinops lanatus* C. Jeffrey & Mesfin** Habit: Herb. Habitat: Montane grassland, 2400–3600 m. Voucher: Tweedie 4183 (EA).***Erigeron bonariensis* L.** Habit: Herb. Habitat: Disturbed soil, 400–2600 m. Vouchers: FOKP 11338 & 11724 (EA, HIB), Mbuni 074 & 724 (EA), Cronquist 2396 (EA).***Euryops brownei* S. Moore** Habit: Shrub. Habitat: Upper forest level and lower heath zone, 2300–3550 m. Vouchers: SAJIT 004794, Tweedie 391 (EA), Lucas 165 (EA), Wamukoya 129 (EA).***Euryops chrysanthemoides* (DC.) B. Nord.** Habit: Shrub. Habitat: Heath zone, 2500–3500 m. Vouchers: FOKP 11578 & 11624 (EA, HIB), Mbuni 315 & 624 (EA).***Ethulia vernonioides* (Schweinf.) M.G. Gilbert** Habit: Shrub. Habitat: Grassland, 1650–2750 m. Vouchers: SAJIT 006815 (EA, HIB), FOKP 989, 1803 & 11550 (EA, HIB), Mbuni 287 (EA), Webster 888 (EA).***Eupatorium adenophorum* Spreng.** Habit: Herb. Habitat: Riverine, 1750–2500 m. Voucher: Symes 282 (EA).***Eupatorium africanum* Oliv. & Hieron.** Habit: Herb. Habitat: Riverine, 1700–2500 m. Voucher: Symes 31 (EA).

- Felicia abyssinica* Sch. Bip. ex A. Rich. Habit: Herb. Habitat: Grassland, 1300–2500 m. Voucher: Symes 527 (EA).
- Galinsoga quadriradiata* Ruiz & Pav. Habit: Herb. Habitat: Wet highland, 1800–2500 m. Vouchers: FOKP 11426 (EA, HIB), Mbuni 162 (EA).
- Galinsoga parviflora* Cav. Habit: Herb. Habitat: Wet highland, 300–2300 m. Voucher: Jeffery 272 (EA).
- Gerbera hirsuta* (Forssk.) Less. Habit: Herb. Habitat: Highland grassland, 1500–3000 m. Voucher: Mabberley 208 (EA).
- Gerbera viridifolia* (DC.) Sch. Bip. Habit: Herb. Habitat: Wooded grassland, 1600–2500 m. Voucher: Symes 52 (EA).
- Gerbera piloselloides* (L.) Cass. Habit: Herb. Habitat: Upland and highland grassland, 1500–3400 m. Voucher: SAJIT 005106 (EA, HIB).
- Gnaphalium unionis* Sch. Bip. ex Oliv. & Hiern Habit: Herb. Habitat: Grassland, 1600–3200 m. Vouchers: FOKP 1794 (EA, HIB), Townsend 238 (EA).
- Gnaphalium declinatum* L. f. Habit: Herb. Habitat: Grassland, 1600–3000 m. Voucher: Trelawny 4384 (EA).
- Gnaphalium luteoalbum* L. Habit: Herb. Habitat: Highland grassland, 300–3050 m. Vouchers: Symes 74 (EA), Thulin & Tidigs 115 (EA).
- Guizotia scabra* (Vis.) Chiov. Habit: Herb. Habitat: Upland grassland, 1300–3200 m. Vouchers: Thulin 46 (EA), Lind 5098 (EA).
- Guizotia jacksonii* (S. Moore) J. Baagøe Habit: Herb. Habitat: Bamboo, heath zone, 2400–3500 m. Voucher: Thulin & Tidigs 68 (EA).
- Gutenbergia rueppellii* Sch. Bip. Habit: Herb. Habitat: Rocky grassland, 900–2200 m. Voucher: Bogdan 3853 (EA).
- Haplocarpha rueppellii* (Sch. Bip.) K. Lewin. Habit: Herb. Habitat: Alpine zone, 2600–3550 m. Voucher: SAJIT 005123 (EA, HIB).
- Helichrysum argyranthum* O. Hoffm. Habit: Shrub. Habitat: Upper forest edge, streamside, heath zone, 2100–3550 m. Vouchers: FOKP 996, 11264, 11374 & 11340 (EA, HIB), Mbuni 020 (EA).
- Helichrysum brownei* S. Moore Habit: Shrub. Habitat: Heath zone, 3000–3550 m. Voucher: SAJIT 005111 (EA, HIB).
- Helichrysum cymosum* (L.) D. Don Habit: Shrub. Habitat: Wooded land, 1600–2900 m. Voucher: Symes 624 (EA).
- Helichrysum ellipticifolium* Moeser Habit: Shrub. Habitat: Alpine grassland, 2650–3550 m. Voucher: Knox 3390 (EA).
- Helichrysum foetidum* (L.) Cass. Habit: Herb. Habitat: Upland forest, forest margin, 2400–3000 m. Vouchers: FOKP 11520 (EA, HIB), Mbuni 256 & 723 (EA), Mabberley 583 (EA), Symes 99 (EA).
- Helichrysum formosissimum* Sch. Bip. Habit: Shrub. Herb. Habitat: Alpine zone, 2300–3500 m. Voucher: Bogdan 5000 (EA).
- Helichrysum formosissimum* var. *guilelmii* (Engl.) Mesfin Habit: Herb. Habitat: Heath zone, moorland, upper bamboo zone, 1800–2500 m. Voucher: Mabberley 571 (EA).



- Helichrysum forskalii* (J.F. Gmel.) Hilliard & B.L. Burt** Habit: Herb. Habitat: Rocky grassland, 1200–3500 m. Vouchers: SAJIT 005104 & 006805 (EA, HIB), FOKP 10905 & 11538 (EA, HIB), Mbuni 274 (EA), Knox 3352 (EA), Symes 99 (EA).
- Helichrysum gerberifolium* Sch. Bip. ex A. Rich.** Habit: Herb. Habitat: Wooded grassland, 2600–3500 m. Voucher: Symes 25 (EA).
- Helichrysum globosum* Sch. Bip.** Habit: Herb. Habitat: Upland grassland, 1800–3300 m. Vouchers: FOKP 11478 (EA, HIB), Mbuni 214 (EA).
- Helichrysum gloria-dei* Chiov.** Habit: Shrub. Habitat: Alpine zone, 3300–3550 m. Voucher: SAJIT 005108 (EA, HIB).
- Helichrysum kilimanjari* Oliv.** Habit: Herb. Habitat: Lower alpine zone, 2800–3500 m. Vouchers: Mabberley & McCall 218 (EA), Knox 3863 (EA).
- Helichrysum maranguense* O. Hoffm.** Habit: Shrub. Habitat: Montane rain forest, 2250–3500 m. Vouchers: SAJIT 006922 (EA, HIB), FOKP 11022 (EA, HIB).
- Helichrysum meyeri-johannis* Engl.** Habit: Herb. Habitat: Alpine grassland, 2900–3550 m. Voucher: Dale 3418 (EA).
- Helichrysum nandense* S. Moore** Habit: Shrub. Habitat: Grassland, 2250–2900 m. Vouchers: Knox 3447 (EA), Blake 3080 (EA).
- Helichrysum odoratissimum* (L.) Sweet** Habit: Shrub. Habitat: Dry areas, 1000–3500 m. Vouchers: FOKP 11537 (EA, HIB), Mbuni 273 (EA), Thulin & Tidigs 254 (EA).
- Helichrysum panduratum* var. *panduratum* O. Hoffm.** Habit: Shrub. Habitat: Grassland, 1600–2900 m. Voucher: Symes 396 (EA).
- Helichrysum setosum* Harv.** Habit: Herb. Habitat: Montane forest, 1900–2750 m. Voucher: FOKP 944 (EA, HIB).
- Helichrysum schimperi* (Sch. Bip. ex A. Rich.) Moeser** Habit: Shrub. Habitat: Dry forest 1600–3400 m. Vouchers: FOKP 11340 (EA, HIB), Mbuni 076 (EA).
- Helichrysum stenopterum* DC.** Habit: Herb. Habitat: Upper forest edge, 2660–3500 m. Vouchers: FOKP 11285 (EA, HIB), Mbuni 021 (EA), Symes 206 (EA).
- Hirpicium diffusum* (O. Hoffm.) Roessler** Habit: Herb. Habitat: Disturbed grassland, 500–2200 m. Vouchers: FOKP 11690 & 14476 (EA), Mbuni 212 & 690 (EA).
- Inula glomerata* Oliv. & Hiern** Habit: Herb. Habitat: Wooded grassland, 1500–2900 m. Vouchers: Freidberg & Kaplan 56 (EA), FOKP 11328 (EA, HIB).
- Inula mannii* (Hook. f.) Oliv. & Hiern** Habit: Herb. Habitat: Wet montane forest, 1700–2750 m. Voucher: Tweedie 4184 (EA).
- Kleinia scottioides* C. Jeffrey.** Habit: Herb. Habitat: Bushland, wooded grassland, 900–1900 m. Voucher: Meyerhoff 112 (EA).
- Lactuca capensis* Thunb.** Habit: Herb. Habitat: Disturbed ground, montane forest, 1900–3200 m. Voucher: Symes 43 (EA).
- Lactuca glandulifera* Hook. f.** Habit: Herb. Habitat: Montane rain forest, 1900–3290 m. Vouchers: FOKP 1040 (EA, HIB), FOKP 938 (EA).
- Lactuca inermis* Forssk.** Habit: Herb. Habitat: Medium altitude, 500–3300 m. Vouchers: FOKP 11348 (EA, HIB), Mbuni 084 (EA).

- Laggera brevipes* Oliv. & Hiern** Habit: Herb. Habitat: Upland grassland, 1050–2400 m. Vouchers: SAJIT 006881 (EA, HIB), Mbuni 240A (EA).
- Laggera crispata* (Vahl) Hepper & J.R.I. Wood** Habit: Shrub. Habitat: Grassland and forest margin, 150–2400 m. Vouchers: SAJIT 006801 (EA, HIB), FOKP 939, 1011, 10901 & 11505 (EA, HIB), Mbuni 241 (EA).
- Laggera elatior* R.E. Fr.** Habit: Herb. Habitat: Wet Montane forest, 100–3300 m. Vouchers: FOKP 11372 (EA, HIB), Mbuni 065 (EA), Mabberley 483 (EA).
- Laggera pterodonta* (DC.) Sch. Bip. ex Oliv.** Habit: Herb. Habitat: Upland grassland, 1050–2400 m. Voucher: FOKP 1011 (EA, HIB).
- Melanthera pungens* Oliv. & Hiern** Habit: Herb. Habitat: Wooded grassland, 1650–2300 m. Voucher: Napier 1929 (EA, HIB).
- Melanthera scandens* (Schumach. & Thonn.) Roberty** Habit: Shrub. Habitat: Upland forest, 1300–2200 m. Vouchers: FOKP 11755 (EA, HIB), Mbuni 755 (EA).
- Micractis bojeri* DC.** Habit: Herb. Habitat: Disturbed streamside, 1700–2300 m. Vouchers: FOKP 11409 (EA, HIB), Mbuni 145 (EA).
- Microglossa densiflora* Hook. f.** Habit: Shrub. Habitat: Bushland, 1700–3200 m. Vouchers: SAJIT 006797 (EA, HIB), FOKP 1219 & 10897 (EA, HIB), Agnew et al. 10462 (EA).
- Mikania chenopodifolia* Willd.** Habit: Climber. Habitat: Riverine forest, 0–2000 m. Vouchers: SAJIT 006921 (EA, HIB), FOKP 946 & 11021 (EA, HIB).
- Mikaniopsis bambuseti* (R.E. Fr.) C. Jeffrey** Habit: Climber. Habitat: Dry upland forest, bamboo, 2100–3000 m. Vouchers: SAJIT 006929 (EA, HIB), Townsend 2393 (EA).
- Nidorella spartioides* (O. Hoffm.) Cronquist** Habit: Herb. Habitat: Wooded grassland, 1675–2150 m. Voucher: Napier 1920 (EA).
- Notonia abyssinica* A. Rich.** Habit: Herb. Habitat: Bushland, 1600–2800 m. Vouchers: FOKP 11559 (EA, HIB) & Mbuni 296 (EA).
- Pentas parvifolia* Hiern** Habit: Shrub. Habitat: Bushland and Wooded grassland, 90–2500 m. Vouchers: FOKP 11467 & 11670 (EA, HIB) & Mbuni 203 & 670 (EA).
- Pseudognaphalium luteoalbum* subsp. *affine* (D. Don) Hilliard & Burt** Habit: Herb. Habitat: Highland grassland, 300–3050 m. Vouchers: FOKP 11303 (EA, HIB), Mbuni 039 (EA), Thulin & Tidigs 115 (EA).
- Psiadia punctulata* (DC.) Vatke** Habit: Shrub. Habitat: Grassland, bushland, forest edge, 1000–2500 m. Vouchers: FOKP 11465 (EA, HIB), Mbuni 201 & 748 (EA).
- Senecio hedbergii* C. Jeffrey** Habit: Shrub. Habitat: Rocky open grassland, Heath Vegetation, 3300–3550 m. Voucher: Thulin & Tidigs 217 (EA).
- Senecio maranguensis* O. Hoffm.** Habit: Shrub. Habitat: Upper forest edge, 2700–2900 m. Voucher: SAJIT 005117 (EA, HIB).
- Senecio moorei* R.E. Fr.** Habit: Shrub. Habitat: Grassland, 1800–3500 m. Voucher: Townsend 2381 (EA), Thulin 167 (EA).
- Senecio plantagineoides* C. Jeffrey** Habit: Herb. Habitat: Grassland, 1700–2000 m. Voucher: Powles 12 (EA).

- Senecio pseudosubsessilis* C. Jeffrey** Habit: Herb. Habitat: Woodland edge, riverine, 1800–3000 m. Vouchers: Tweedie 3379 (EA), Tweedie 2169 (EA).
- Senecio purtschelleri* Engl.** Habit: Herb. Habitat: Alpine zone, 3200–3550 m. Voucher: Beentje 3378 (EA).
- Senecio pseudosubsessilis* C. Jeffrey** Habit: Shrub. Habitat: Woodland edge, riverine, 1800–3000 m. Voucher: Thulin & Tidigs 217 (EA).
- Senecio schweinfurthii* O. Hoffm.** Habit: Herb. Habitat: Montane, alpine grassland, 2300–3500 m. Vouchers: Tweedie 3763(EA), Thulin & Tidigs 164 (EA), Part II Botany 5157(EA), Symes 640 (EA).
- Senecio subsessilis* Oliv. & Hiern** Habit: Herb. Habitat: Montane rain forest, 2400–3120 m. Voucher: Thulin 187 (EA).
- Senecio syringifolius* O. Hoffm.** Habit: Climber. Habitat: Montane rain forest, 1500–3300 m. Voucher: Townsend 2392 (EA).
- Schkubria pinnata* (Lam.) Kuntze ex Thell.** Habit: Herb. Habitat: Cultivated land, 1000–2220 m. Vouchers: FOKP 11484 (EA), Mbuni 220 (EA).
- Solanecio mannii* (Hook. f.) C. Jeffrey** Habit: Tree. Habitat: Montane forest, 1400–2700 m. Vouchers: FOKP 1110, 1261, 11279 & 11457 (EA, HIB), Mbuni 193 (EA).
- Sonchus afromontanus* R.E. Fr.** Habit: Herb. Habitat: Wet highland grassland, 2200–3700 m. Voucher: Thulin & Tidigs 226 (EA).
- Sonchus schweinfurthii* Oliv. & Hiern** Habit: Herb. Habitat: Montane forest, 1700–2800 m. Voucher: Thulin & Tidigs 69 (EA).
- Spilanthes mauritiana* (A. Rich. ex Pers.) DC.** Habit: Herb. Habitat: Swamp areas, 1500–2000 m. Voucher: Hedberg 79 (EA).
- Sphaeranthus suaveolens* (Forssk.) DC.** Habit: Herb. Habitat: Dry stream bed, 1200–2500 m. Vouchers: FOKP 1729, 11324 & 11653 (EA, HIB), Mbuni 060, 653 (EA).
- Stoebe kilimandscharica* O. Hoffm.** Habit: Shrub. Habitat: Heath zone and moorland, 2700–3350 m. Vouchers: FOKP 11317 (EA, HIB), Mbuni 053 (EA), Mwangangi & Kariuki 372 (EA), Thulin & Tidigs 250 (EA).
- Stomatanthes africanus* (Oliv. & Hiern) R.M. King & H. Rob.** Habit: Herb. Habitat: Wooded grassland, 2000–3000 m. Voucher: Symes 282 (EA).
- Tarchonanthus camphoratus* L.** Habit: Shrub. Habitat: Bushland, 1500–2300 m. Voucher: FOKP 11297 (EA, HIB).
- Tolpis capensis* (L.) Sch. Bip.** Habit: Herb. Habitat: Wet grassland, 2000–3100 m. Vouchers: FOKP 11301 (EA, HIB), Mbuni 037 (EA), Townsend 2368b (EA), Hepper & Field 5031 (EA).
- Tridax procumbens* (L.) L.** Habit: Herb. Habitat: Roadside, below 2300 m. Voucher: SAJIT Z0038 (EA, HIB).
- Vernonia amygdalina* Delile** Habit: Shrub. Habitat: Disturbed cultivated area, 200–2300 m. Voucher: FOKP 10934 (EA, HIB).
- Vernonia auriculata* Griseb.** Habit: Shrub. Habitat: Woodland, bushland, 1600–2850 m. Voucher: FOKP 959 (EA, HIB).
- Vernonia auriculifera* Hiern** Habit: Shrub. Habitat: Woodland, bushland, 1600–2650 m. Vouchers: SAJIT 006834 (EA, HIB), FOKP 11401 & 11718 (EA, HIB), Mbuni 137 & 718 (EA), Symes 268 (EA).

- Vernonia holstii* O. Hoffm.** Habit: Shrub. Habitat: Dry forest, 1000–2050 m. Voucher: FOKP 11454 (EA, HIB), Mbuni 190 & 718 (EA).
- Vernonia galamensis* subsp. *afromontana* (R.E. Fr.) M.G. Gilbert** Habit: Shrub. Habitat: Woodland edge, 800–2200 m. Vouchers: SAJIT 006896 (EA, HIB), FOKP 11331 & 11400 (EA, HIB), Mbuni 067 & 136 (EA), Napier 1957 (EA).
- Vernonia hymenolepis* A. Rich.** Habit: Herb. Habitat: Bushed grassland, 1600–2850 m. Vouchers: FOKP 11287 & 11402 (EA, HIB), Mbuni 023, 713 (EA), Thulin & Tidigs 125 (EA).
- Vernonia karaguensis* Oliv. & Hiern** Habit: Herb. Habitat: Wooded grassland, 1200–2500 m. Voucher: Webster 8894 (EA).
- Vernonia lasiopus* O. Hoffm.** Habit: Herb. Habitat: Abandoned cultivation, 1100–2800 m. Voucher: Symes 261 (EA).
- Vernonia smithiana* Less.** Habit: Herb. Habitat: Wooded grassland, 1350–2700 m. Vouchers: Napier 1934 (EA), Symes 27 (EA).
- Vernonia syringifolia* O. Hoffm.** Habit: Shrub. Habitat: Montane rain forest, 2000–3000 m. Vouchers: SAJIT 006800 & 006818 (EA, HIB), Webster 8897 (EA).
- Vernonia turbinata* Oliv. & Hiern ex Oliv.** Habit: Herb. Habitat: Wooded grassland, 1400–2400 m. Voucher: Verdcourt 745 (EA).
- Vernonia urticifolia* A. Rich.** Habit: Shrub. Habitat: Forest margin and bamboo edge, 1400–2800 m. Vouchers: SAJIT Z0084 (EA, HIB), FOKP 11358 (EA, HIB), Mbuni 094 (EA).
- Vernonia westermanii* Ekman & Dusén ex Malme** Habit: Herb. Habitat: Wooded grassland, 1400–2400 m. Voucher: FOKP 1064 (EA, HIB).
- Xanthium pungens* Wallr.** Habit: Herb. Habitat: River bed, 1600–1800 m, Voucher: FOKP 11302 (EA, HIB).

## F127. Caprifoliaceae

3 Genera, 3 Species

- Cephalaria pungens* Szabó** Habit: Herb. Habitat: Montane and subalpine grassland, 2400–3000 m. Vouchers: FOKP 11316 (EA, HIB), Irwin 136 (EA).
- Scabiosa columbaria* L.** Habit: Herb. Habitat: Heathland and upper land forest, 2200–3550 m. Vouchers: FOKP 11314 (EA, HIB), Webster 8843 (EA).
- Valeriana volkensii* Engl.** Habit: Herb. Habitat: streamside and marshes, 3000–3500 m. Voucher: Mabberley McCall 231 (EA).

## F128. Pittosporaceae

1 Genus, 3 Species

- Pittosporum mannii* Hook. f.** Habit: Shrub. Habitat: Dry evergreen forest, 2000–2750 m. Vouchers: SAJIT Z0026 (EA, HIB), FOKP 11570 (EA, HIB), Mbuni 307 & 651 (EA).
- Pittosporum lanatum* Hutch. & E.A. Bruce** Habit: Tree. Habitat: Dry evergreen forest, 2100–2850 m. Vouchers: FOKP 11391 (EA, HIB), Dale 672 (EA).



***Pittosporum viridiflorum* Sims.** Habit: Tree. Habitat: Wooded grassland, 1300–2500 m. Voucher: SAJIT 007050 (EA, HIB).

### F129. Araliaceae

4 Genera, 8 Species

***Cussonia arborea* Hochst. ex A. Rich.** Habit: Tree. Habitat: Wooded grassland, 1100–2400 m. Voucher: Napier 1980 (EA).

***Cussonia spicata* Thunb.** Habit: Tree. Habitat: Riverine, grassland forest, 1450–2500 m. Voucher: FOKP 1026 (EA, HIB).

***Hydrocotyle mannii* Hook. f.** Habit: Herb. Habitat: Forest floor, bamboo forest, 600–3370 m. Voucher: Mabberley & McCall 301 (EA).

***Hydrocotyle ranunculoides* L. f.** Habit: Herb. Habitat: Common in ponds and marshes, 700–2400 m. Voucher: Barnley via Tweedie 2584 (EA).

***Polyscias fulva* (Hiern) Harms** Habit: Tree. Habitat: Wet highland forest, 1400–2310 m. Vouchers: FOKP 1072 (EA, HIB), SAJIT Z0034 (EA, HIB).

***Polyscias kikuyuensis* Summerh.** Habit: Tree. Habitat: Wet upland forest, 1750–2750 m. Voucher: FOKP 1722 (EA, HIB).

***Schefflera abyssinica* (Hochst. ex A. Rich.) Harms.** Habit: Tree. Habitat: Wet upland forest, 1840–2770 m. Vouchers: SAJIT 004790 & 005092 (EA, HIB).

***Schefflera volkensii* (Harms) Harms.** Habit: Tree. Habitat: Wet or dry upland forest, 1700–2250 m. Vouchers: SAJIT 004785 (EA, HIB), FOKP 1007, 1228, 1892 & 11388 (EA, HIB), Friis et al. 2530 (EA).

### F130. Apiaceae

14 Genera, 22 Species

***Agrocharis melanantha* Hochst.** Habit: Herb. Habitat: High altitude grassland, 2300–2700 m. Voucher: Thulin & Tidings 126 (EA).

***Agrocharis pedunculata* (Baker f.) Heywood & Jury.** Habit: Herb. Habitat: Wooded grassland, 1860–2100 m. Voucher: Napier 1922 (EA).

***Alepidea peduncularis* Steud. ex A. Rich.** Habit: Herb. Habitat: Montane grassland, 1530–3550 m. Vouchers: SAJIT 004810 & 005105 (EA, HIB), FOKP 11315 (EA, HIB), Mabberley & McCall 113 (EA), Napper 1503 (EA).

***Apium leptophyllum* (Pers.) F. Muell. ex Benth.** Habit: Herb. Habitat: Disturbed areas, 1550–1660 m. Vouchers: FOKP 1299 & 11300 (EA, HIB), Mbuni 036 (EA).

***Anthriscus sylvestris* (L.) Hoffm.** Habit: Herb. Habitat: Bamboo zone, 2100–3550 m. Voucher: Mabberley McCall 200 (EA).

***Caucalis incognita* C. Norman** Habit: Herb. Habitat: Grassland, 1530–2550m. Voucher: Symes 514 (EA).

***Caucalis pedunculata* Baker f.** Habit: Herb. Habitat: Disturbed areas, 1550–2160 m. Voucher: Symes 524 (EA).

- Cryptotaenia africana* (Hook. f.) **Drude** Habit: Herb. Habitat: Montane forest, 1600–3000 m. Vouchers: FOKP 1741 (EA, HIB), Irwin 3777 (EA), Mabberley & McCall 35 (EA), Irving 377 (EA).
- Diplophium africanum* **Turcz.** Habit: Herb. Habitat: Wooded grassland, 1350–2500 m. Voucher: Kokwaro 2535 (EA).
- Haplosciadium abyssinicum* **Hochst.** Habit: Herb. Habitat: Disturbed areas, 2150–4600 m. Voucher: Thulin & Tidigs 152 (EA).
- Heteromorpha arborescens* var. *abyssinica* (**Hochst. ex A. Rich.**) **H. Wolff** Habit: Herb. Habitat: Wooded grassland, 1300–2600 m. Voucher: Thulin & Tidigs 152 (EA).
- Heteromorpha trifoliata* (**H.L. Wendl.**) **Eckl. & Zeyh.** Habit: Habitat: Wooded grassland, 1250–2500 m. Vouchers: Mbuni 304 (EA, HIB), FOKP 11567 (EA, HIB).
- Oenanthe procumbens* (**H. Wolff**) **Norman** Habit: Herb. Habitat: Bamboo and highland forest, 1830–3200 m. Vouchers: Mabberley 574 (EA, HIB), Thulin & Tidigs 234 (EA).
- Peucedanum aculeolatum* **Engl** Habit: Herb. Habitat: Montane forest, 1900–2700 m. Voucher: FOKP 11398 (EA, HIB).
- Peucedanum elgonense* **H. Wolff** Habit: Herb. Habitat: Subalpine zone, streamside marshes, 1800–3500 m. Voucher: SAJIT 004797 (EA, HIB).
- Peucedanum winkleri* **H. Wolff** Habit: Herb. Habitat: Montane forest, 1800–3500 m. Voucher: Thulin & Tidigs 45 (EA).
- Peucedanum kerstenii* **Engl.** Habit: Herb. Habitat: Montane forest, 1800–3500 m. Voucher: Bogdan 4995 (EA).
- Pimpinella hirtella* **A. Rich.** Habit: Herb. Habitat: Upland grassland, 1800–2850 m. Vouchers: Symes 11345 (EA), Webster 8820 (EA).
- Pimpinella lindblomii* **H. Wolff** Habit: Herb. Habitat: Upland grassland, 1530–2600 m. Vouchers: FOKP 11695, Mbuni 695 (EA), Lewis 5988 (EA), Symes 755 (EA).
- Pimpinella oreophila* **Hook. f.** Habit: Herb. Habitat: Upper montane forest, heath zone, 3000–3550 m. Voucher: SAJIT 005151 (EA, HIB).
- Sanicula elata* **Buch.–Ham. ex D. Don** Habit: Herb. Habitat: Bamboo zone, 1500–3220 m. Vouchers: SAJIT 006902 & 006906 (EA, HIB), FOKP 1083, 11006 & 11614 (EA, HIB), Mbuni 614 (EA), Townsend 2384 (EA).
- Torilis arvensis* subsp. *purpurea* (**Guss.**) **Thell.** Habit: Herb. Habitat: Drier upland forest, 1560–2850 m, Bogdan 5001 (EA).

## Acknowledgements

We are grateful to the National Environment and Management Authority, the Kenya Forest Service and Kenya Wildlife Service for facilitating access permit to undertake botanical research in Cherangani Hills Forest. The authors are indebted to the staff of the Department of Botany, National Museums of Kenya, especially Peris Kamau, Itambo Malombe, Thomas Mwadime Nyange, Mathias Mbale and Kennedy Matheka for their assistance in the course of the research studies. We thank students from the



University of Chinese Academy of Sciences who tirelessly assisted in data collection. We express our general appreciation to Anne Christine Ochola for reviewing the English version of the text. We are also grateful to the two anonymous reviewers and editors for giving very useful comments on the article. This study was supported by the fund of Sino-Africa Joint Research Center, CAS, China (Y323771W07 and SAJC201322) and the National Natural Science Foundation of China (31800176).

## References

- Agnew ADQ (2013) Upland Kenya wild flowers and ferns, third edition. Nature Kenya Publications, Nairobi.
- Agnew ADQ, Agnew S (1994) Upland Kenya wild flowers, second edition. East Africa Natural History Society, Nairobi.
- APG IV (2016) An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG IV. *Botanical Journal of the Linnean Society* 181(1): 1–20. <https://doi.org/10.1111/boj.12385>
- Beentje HJ, Ndiang'ui N (1988) Ecology of the forests. An ecological and floristic study of the forests of the Taita Hills, Kenya. *Utafiti Occasional Papers of the National Museums of Kenya* 1: 1–42
- Beentje HJ (1994) Kenya trees, shrubs and lianas. National Museums of Kenya, Nairobi.
- Beentje HJ (2016) Plant Glossary, an Illustrated Dictionary of Plant Terms (2<sup>nd</sup> edn). Royal Botanic Gardens, Kew.
- Blackett H (1994) Forest inventory report number 13 Cherangani hills east, Kipkunjurr. KIF-CON, Karura forest station, Nairobi.
- Blundell M (1987) Collins Guide to the Wild Flowers of East Africa. Collins, London.
- Bytebier B, Bussmann RW (2000) The vegetation of mount Nyiru Samburu district, Kenya. A checklist and syntaxonomical survey. *Journal of East African Natural History* 89(1): 45–71. [https://doi.org/10.2982/0012-8317\(2000\)89\[45:TVOMNS\]2.0.CO;2](https://doi.org/10.2982/0012-8317(2000)89[45:TVOMNS]2.0.CO;2)
- Chong KY, Hugh TW, Corlett RT (2009) A checklist of the total vascular plant flora of Singapore: native, naturalized and cultivated species. Raffles Museum of Biodiversity Research.
- Christenhusz MJM, Zhang XC, Schneider H (2011) A linear sequence of extant families and genera of lycophytes and ferns. *Phytotaxa* 19(1): 7–54. <https://doi.org/10.11646/phytotaxa.19.1.2>
- Filgueiras TS, Brochado AL, Nogueira PE, Gualla GF (1994) Caminhamento-Um método expedito para levantamentos florísticos e qualitativos. *Caderno Geociências IBGE* 12: 39–43.
- Fischer E, Rembold K, Althof A, Obholzer J, Malombe I, Mwachala G, Theisen I (2010) Annotated checklist of the vascular plants of Kakamega forest, Western province, Kenya. *Journal of East African Natural History* 99(2): 129–226. <https://doi.org/10.2982/028.099.0205>
- FAO [Food and Agriculture Organisation] (1997) State of the world's forests. FAO, Rome.
- FAO [Food and Agriculture Organisation] (2010) Global forest resources assessment 2010: Main report, Food and Agriculture Organization. FAO Forestry Paper, 163 pp.
- Frood D, Calder M (1987) Natural conservation in Victoria study report. Victoria National Parks Association, Melbourne.
- Gachathi FN, Johansson SG, Alakoski-Johansson GM (1994) A check-list of indigenous trees and shrubs of Bura, Tana River district Kenya with Malakote, Orma and Somali names.



- Journal of East African Natural History 83(2): 117–141. [https://doi.org/10.2982/0012-8317\(1994\)83\[117:ACOITA\]2.0.CO;2](https://doi.org/10.2982/0012-8317(1994)83[117:ACOITA]2.0.CO;2)
- Girma A, Fischer E, Dumbo B (2015) Vascular plant diversity and community structure of Nandi forests, western Kenya. *Journal of East African Natural History* 103(2): 125–152. <https://doi.org/10.2982/028.103.0202>
- Hall JB, Swaine MD (1981) Distribution and ecology of vascular plants in a tropical rain forest – Forest vegetation in Ghana. Springer Netherlands, Netherlands, 383 pp. <https://doi.org/10.1007/978-94-009-8650-3>
- Heywood VH, Hawksworth DL, Mirk PM, Clarke SD (1997) Information needs in biodiversity assessments, from genes to ecosystems. *Biodiversity information needs and options*. Centre for Agriculture and Biosciences International, Wallingford, 15–20.
- Holmgren P (2006) Global land use area change matrix-input to the fourth Global Environmental Outlook (GEO-4), Forestry department, FAO. Working paper, 134 pp.
- IUCN (2013) IUCN Red List of Threatened Species (ver. 2013.2). <http://www.iucnredlist.org>
- Luke Q (2005) Annotated checklist of the plants of the Shimba hills, Kwale district, Kenya. *Journal of East African Natural History* 94(1): 5–120. [https://doi.org/10.2982/0012-8317\(2005\)94\[5:ACOTPO\]2.0.CO;2](https://doi.org/10.2982/0012-8317(2005)94[5:ACOTPO]2.0.CO;2)
- Lung T, Schaab G (2009) A comparative assessment of land cover dynamics of three protected forest areas in tropical Eastern Africa. *Environmental Monitoring and Assessment* 161(1–4): 531–548. <https://doi.org/10.1007/s10661-009-0766-3>
- Lunt ID (1990) Species area curves and growth form spectra for some herb rich woodlands in western Victoria, Australia. *Australian Journal of Ecology* 15(2): 155–161. <https://doi.org/10.1111/j.1442-9993.1990.tb01524.x>
- MEWNR, RDA (2015) Kenya Biodiversity Atlas, Ministry of Environment, Natural Resources and Regional Development Authorities, Nairobi.
- Mitchell N, Schaab G (2008) Developing a disturbance index for five East African forests using GIS to analyse historical forest use as an important driver of current land use/cover. *African Journal of Ecology* 46(4): 572–584. <https://doi.org/10.1111/j.1365-2028.2007.00901.x>
- Muasya JM, Young TP, Okebiro DM (1994) Plant checklist of Ol ari Nyiro ranch and the Mukutan gorge, Laikipia Kenya. *Journal of East African Natural History* 83(2): 143–197. [https://doi.org/10.2982/0012-8317\(1994\)83\[143:VMAPCO\]2.0.CO;2](https://doi.org/10.2982/0012-8317(1994)83[143:VMAPCO]2.0.CO;2)
- Nehal AF, Majila BS, Kala CP (2004) Indigenous knowledge systems and sustainable management of a natural resources in a high altitude society in Kumaun Himalaya, India. *Journal of Human Ecology (Delhi, India)* 16(1): 33–42. <https://doi.org/10.1080/09709274.2004.11905713>
- Ngumbau VM, Nyange M, Dai C, Zhong ZX, Wei N, Malombe I, Hu GW, Wang QF (2017) *Adenia angulosa* (Passifloraceae), a new species from coastal forests of Kenya and Tanzania. *Phytotaxa* 313(1): 137–142. <https://doi.org/10.11646/phytotaxa.313.1.10>
- PPG I (2016) A community-derived classification for extant lycophytes and ferns. *Journal of Systematics and Evolution* 54(6): 563–603. <https://doi.org/10.1111/jse.12229>
- Pratt DJ, Greenway PJ, Gwynne MD (1966) A Classification of East African Rangeland, with an Appendix on Terminology. *Journal of Applied Ecology* 3(2): 369–382. <https://doi.org/10.2307/2401259>
- Roberts MR (2004) Response of the herbaceous layer to disturbance in North American forests. *Canadian Journal of Botany* 82(9): 1273–1283. <https://doi.org/10.1139/b04-091>



- Sayer JA, Zuidema PA, Rijks M (1995) Managing for biodiversity in humid tropical forests. *Commonwealth Forestry Review* 74: 282–287.
- Stevens PF (2012) Angiosperm phylogeny website. <http://www.mobot.org/MOBOT/research/APweb>
- Stewart JJ, Campbell B (2006) *Angraecoid Orchids. Species from the African Region*. Timber Press, Portland, Oregon.
- Synott TJ (1979) A report on the status, importance and protection of montane forests. IPAL technical report number D-2a. UNEPMAB Integrated project in arid lands. UNESCO, Nairobi.
- Thijs KW, Roelen I, Musila WM (2013) Field guide to the woody plants of Taita hills, Kenya. *Journal of East African Natural History* 102(1/2): 1–272.
- Tweedie EM (1976) Habitats and check-list of plants on the Kenya side of Mount Elgon. *Kew Bulletin* 31(2): 227–257. <https://doi.org/10.2307/4109170>
- UNDP (2006) United Nations Development Programme. Community Management of Protected Areas for Conservation (Compact). Community-based initiatives to conserve biodiversity in world heritage landscapes.
- UNEP (2009a) Kenya: Atlas of our changing environment, Nairobi. United Nations Environment Programme, Division of Early Warning and Assessment (DEWA).
- UNEP, FAO, UNFF (2009b) Vital forest graphics, The United Nations Environment Programme, The Food and Agriculture Organization of the United Nations and The United Nations Forum on Forests secretariat.
- Wang X, Feng Z, Ouyang Z (2001) The impact of human disturbance on vegetative carbon storage in forest ecosystems in China. *Forest Ecology and Management* 148(1): 117–123. [https://doi.org/10.1016/S0378-1127\(00\)00482-5](https://doi.org/10.1016/S0378-1127(00)00482-5)
- Wei N, Miyawa DO, David MK, Ngumbau VM, Zhong ZX, Mwachala G, Hu GW, Wang QF (2017) *Zehneria longiflora* (Cucurbitaceae), a new species from Kenya. *Phytotaxa* 324(1): 89–94. <https://doi.org/10.11646/phytotaxa.324.1.7>
- Whigham DF (2004) Ecology of woodland herbs in temperate deciduous forests. *Annual Review of Ecology and Systematics* 35(1): 583–621. <https://doi.org/10.1146/annurev.ecolsys.35.021103.105708>
- Whittaker RH, Niering WA, Crisp MD (1979) Structure, pattern and diversity of a mallee community in south Wales. *Vegetatio* 39(2): 65–76. <https://doi.org/10.1007/BF00052018>
- Zhou YD (2017) Inventory and diversity of vascular plants in Mount Kenya, East Africa. PhD Thesis, Wuhan Botanical Garden, Wuhan.
- Zhou YD, Hu GW, Yan X, Mwachala G, Gituru RW, Wang QF (2016a) *Sedum keniense* (Crasulaceae), a new species from Mt. Kenya, East Africa. *Phytotaxa* 261(2): 177–184. <https://doi.org/10.11646/phytotaxa.261.2.7>
- Zhou YD, Mbuni Y, Hu GW, Yan X, Mwachala G, Wang QF (2016b) *Zehneria subcoraicea* (Cucurbitaceae), a new species from Kenya. *Phytotaxa* 277(3): 282–286. <https://doi.org/10.11646/phytotaxa.277.3.6>
- Zhou YD, Liu B, Mbuni Y, Yan X, Mwachala G, Hu G, Wang QF (2017a) Vascular flora of Kenya, based on the flora of tropical East Africa. *PhytoKeys* 90: 113–126.
- Zhou YD, Mbuni Y, Hu GW, Zhong ZX, Yan X, Mwachala G, Wang QF (2017b) *Cissampelos keniensis* (Menispermaceae), a new species from Mount Kenya, East Africa. *Phytotaxa* 292(1): 57–64. <https://doi.org/10.11646/phytotaxa.292.1.5>